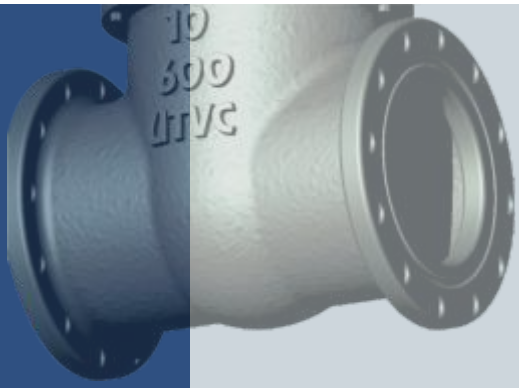
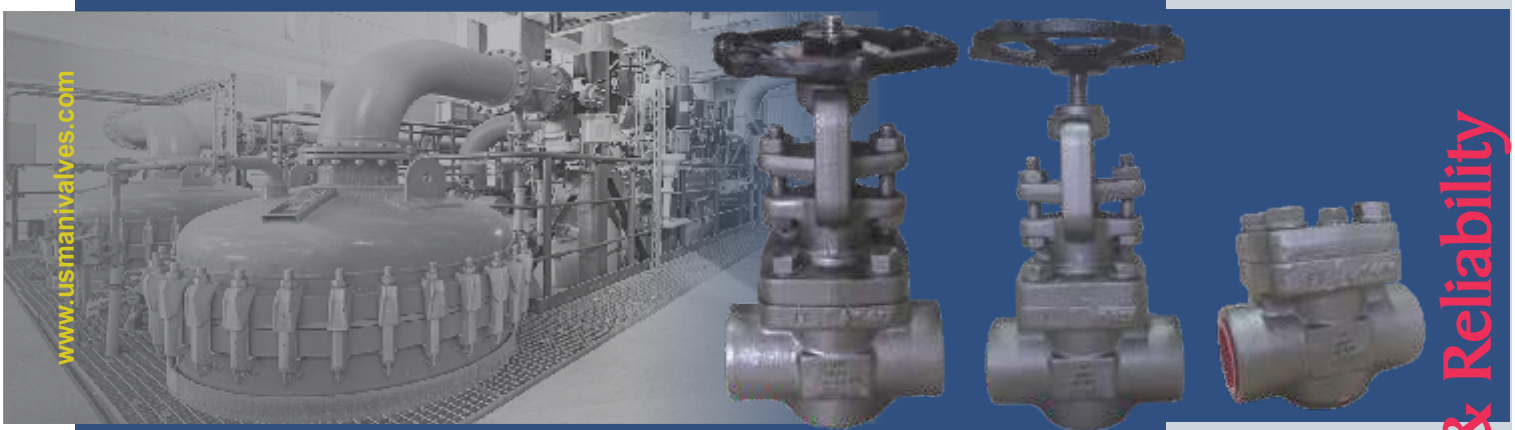


UTVC™

USMANI

TUBES & VALVES CO. PVT. LTD

Forged Steel
Gate Globe and Check Valves



www.usmanivalves.com

True Definition of Safety & Reliability

ASME Class150#300#600#800#2500#4500
API 602 - BS 532 - BS 6364 - ASME B16.34
(15mm. to 50mm.)

VNZ

ICAB INTERNATIONAL COUNCIL OF ACCREDITATION BODIES

SSI NSIC

CE Certified

MAX CERTIFICATIONS

GLOBAL ACCREDITATION BOARD GAB

Max Certifications
ISO 9001:2015

Manufacturers of Industrial Valves

SPECIAL SERVICES

USMANI TUBES & VALVES CO. PVT. LTD. produces a diverse selection of forged steel valves. In the catalogues that follow, we showcase the majority of the products we manufacture, which are typically accessible through our distribution network. All catalogues can be downloaded from our **website: www.usmanivalves.com.**

The selection of forged steel valves that we manufacture extends beyond the oil and gas sectors.

We offer specialized product lines for steam, thermal transfer fluids, power generation, and upstream applications.

1. **BODY.** The body is constructed from forged steel (CS) and is designed to meet the fundamental dimensional requirements outlined in relevant specifications such as API 602, BS 5352, and ASME B16.34. It is offered in both full and reduced standard port designs for globe valves. Additionally, it is available in either T-pattern or Y-pattern configurations.

2. **BONNET.** The bonnet is made of forged steel (CS) and features an integral backseat. It also includes a stuffing box that adheres to the dimensions specified in applicable standards such as API 602.

3. **BODY-BONNET JOINT.** There are two distinct designs for the bonnet joint: the bolted bonnet and the seal welded and threaded type.

4. **GASKET.** The valve with a bolted bonnet joint design utilizes a contained, controlled compression, spiral wound gasket.

5. **BONNET BOLTING.** The bonnet bolting is produced from alloy steel, conforming to the requirements set forth in applicable specifications such as API 602 and ASME B16.34.

6. **SEAT RINGS.** The seat rings are made of steel and are part of the valve trim. They are pressed into the valve body and secured in place, creating a seal with the body. The seating surfaces are ground and lapped. For globe valves, the body seat features an integral weld overlay and is included in the valve trim.

7. **WEDGE.** The wedge, characterized by its solid design, is constructed from forged or investment cast steel and forms part of the valve trim. The seating surfaces are meticulously ground and lapped.

8. **STEM.** The stem is made of forged steel and is an integral component of the valve trim. It features an integral back seat shoulder that aligns with the bonnet's integral backseat. The stem is engineered to meet the fundamental dimensional specifications outlined in applicable standards such as API 602.

9. **GLAND AND FLANGE.** The gland and gland flange assembly employs a distinct two-piece design. This self-aligning configuration permits uneven tightening of the flange while ensuring that the gland remains parallel to the stem and stuffing box.

10. **GLAND BOLTS AND NUTS.** The assembly of steel/stainless steel gland bolts and nuts consists of a stud and double nut arrangement. This design facilitates complete removal from the valve when maintenance is necessary. The incorporation of industry-standard thread full-length studs and nuts also simplifies replacement in the event that these components are lost or require substitution.

11. **YOKE SLEEVE.** The yoke sleeve is fabricated from forged stainless steel, which possesses a high melting point and exhibits resistance to wear and corrosion.

12. **HANDWHEEL.** The handwheel is constructed from forged carbon steel and features an open spoke design. This sturdy construction, combined with appropriate sizing, ensures ease of operation.

---

1. **BODY.** The body is constructed from forged steel and adheres to the fundamental dimensional specifications outlined in relevant standards such as API 602 and ASME B16.34. It is offered in both full port and standard port designs. Additionally, it is available in T-Pattern or Y-Pattern configurations.

2. **COVER.** The cover is made of forged steel and complies with the essential dimensional requirements set forth by applicable standards such as API 602 and ASME B16.34.

3. **BODY-COVER JOINT.** There are two distinct designs for the cover joint. These include the bolted cover and the threaded and seal welded variant.

4. **GASKET.** The valve featuring the bolted cover joint design utilizes a contained, controlled compression, spiral wound gasket.

5. **COVER BOLTING.** The cover bolting is produced from alloy steel in compliance with the relevant specifications such as API 602 and ASME B16.34.

6. **SEAT.** The body seat for the piston and ball check valves consists of an integral weld overlay and forms part of the valve trim. The swing check valve comes with a separate seat ring that is pressed into the valve body and secured in place, creating a seal with the body.

7. **PISTON, BALL OR DISC.** The piston, ball, or disc is made of forged steel and is included in the valve trim. The seating surface of the piston and ball check features a tapered or plug type design. The seating surface of the swing check is designed with a flat seat.

8. **SPRING.** The spring is optional and is provided only upon request.

General Design Specification

Items	American Std.	British Std.
Shell wall thickness and general valve design specifications, Cast steel, Forged steel	API 600 / API 6D / API 602 / ASME B 16.34	BS 1414 (Gate Valve) BS 1873 (Globe Valve) BS 1868 (Check Valve) BS 5352
Pressure-temperature rating	ASME B16.34 / API 602 / API 6D	BS 1560 / BS 5352
Face-to-Face dimension Flanged End End-to-End dimension Butt Weld End @	ASME B16.10 / API 6D	BS 2080
End Flange dimensions Gasket contact facing	ANSI B16.5*	BS 3293 / BS 1560
Welding end dimension Butt Weld	ANSI B16.25	BS 1414 (Gate Valve) BS 1873 (Globe Valve) BS 1868 (Check Valve)
Welding end dimension Socket Weld	ANSI B16.11	
Radiograph and NDT requirements	ASME B 16.34	
Inspection and Testing Standard	API 598 / API 6D	BS 6755

MSS SP-44 for 22 and API 605 for 26" large, for end flange dimensions.
@ End to End Butt Weld and Socket Weld and for forged steel valves as per manufacture standard

Valve Trim

API 600 and BS 1414 / 1873 / 1868 specify the following valve components parts as the valve trim

Description	Gate Valve	Globe Valve	Check Valve
Wedge / Disc seat surface	O	O	O
Body seat surface	O	O	O
Bonnet bush (Backseat)	O	O	---
Stem	O	O	---
Others	Internal small parts	Plug Nut	Hinge pin

Trim Material

API 600 Trim Number	Symbol	Wedge / Disc Surface	Seat Surface	Stem Material
1	1	13% Cr.	13% Cr.	ASTM A276 – T410
2	2	18% Cr. 8% Ni	18% Cr. 8% Ni	ASTM A276 – T304
5	5	Stellite	Stellite	ASTM A276 – T410
8	8	13% Cr.	Stellite	ASTM A276 – T410
9	9	Monel	Monel	Ni Cu Alloy Monel
10	10	18% Cr. 8% Ni	18% Cr. 8% Ni	ASTM A276 – T316
12	12	18% Cr. 8% Ni	Stellite	ASTM A276 – T316
13	13	Alloy 20 19% Cr.29% Ni	Alloy 20 19% Cr.29% Ni	ASTM B473
16	16	Stellite	Stellite	ASTM A276 – T316

Gland Packing Materials

Graphite asbestos with sacrificial inhibitor and inconel wire reinforcement is the standard gland packing material for UTVC cast and Forged steel valves. However various special Gland Packing material shall be used Depending on service conditions.

Packing Material	Service Conditions *F / *C
Inconel wire Graphite Asbestos	1200 / 649 high pressure
PTFE impregnated asbestos	450 / 232 corrosion resistant
Virgin PTFE	450 / 232 corrosion resistant
Graphite asbestos	650 / 343 medium pressure
Grafoil	1500 / 816 corrosion resistant
Gore – Tex	(-400 -520) / (-240 + 270) corrosion resistant
Inconel wire Graphite Non Asbestos	1200 / 649 high pressure

Gasket Material	ANSI Class						
	150	300	600	800	900	1500	2500
Corrugated metal	●	O					
OCT Ring metal			O	O	●	●	●
Compressed asbestos	O						
Spiral wound metal, asbestos filler	O	●	●	●			
Spiral wound metal Grafoil filler	O	O	O	O			
Spiral wound metal PTFE filler		O	O	O			
Seal Ring (Pr. Seal Bonnet)					●	●	●
Virgin PTFE	O	O					
Glass filled PTFE	O	O					

● Niton Standard O Option

UTVC™

USMANI
TUBES & VALVES CO. PVT. LTD.
MANUFACTURERS OF INDUSTRIAL VALVES

Pressure - Temperature charts

ASTM A105 - A350/LF2

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	285	19.7	740	51.0	1480	102.1	1975	136.2	2220	153.1	3705	255.5	6170	425.5	11110	766.2
200	93	260	17.9	675	46.6	1350	93.1	1800	124.1	2025	139.7	3375	232.8	5625	387.9	10120	697.9
300	149	230	15.9	655	45.2	1315	90.7	1750	120.7	1970	135.9	3280	226.2	5470	377.2	9845	679.0
400	204	200	13.8	635	43.8	1270	87.6	1690	116.6	1900	131.0	3170	218.6	5280	364.1	9505	655.5
500	260	170	11.7	600	41.4	1200	82.8	1595	110.0	1795	123.8	2995	206.6	4990	344.1	8980	619.3
600	316	140	9.7	550	37.9	1095	75.5	1460	100.7	1640	113.1	2735	188.6	4560	314.5	8210	566.2
650	343	125	8.6	535	36.9	1075	74.1	1430	98.6	1610	111.0	2685	185.2	4475	308.6	8055	555.5
700	371	110	7.6	535	36.9	1065	73.4	1420	97.9	1600	110.3	2665	183.8	4440	306.2	7990	551.0
750	399	95	6.6	505	34.8	1010	69.7	1345	92.8	1510	104.1	2520	173.8	4200	289.7	7560	521.4
800	427	80	5.5	410	28.3	825	56.9	1100	75.9	1235	85.2	2060	142.1	3430	236.6	6170	425.5
850	454	65	4.5	270	18.6	535	36.9	715	49.3	805	55.5	1340	92.4	2230	153.8	4010	276.6
900	482	50	3.4	170	11.7	345	23.8	460	31.7	515	35.5	860	59.3	1430	98.6	2570	177.2
950	510	35	2.4	105	7.2	205	14.1	275	19.0	310	21.4	515	35.5	860	59.3	1545	106.6
1000	538	20	1.4	50	3.4	105	7.2	140	9.7	155	10.7	260	17.9	430	29.7	770	53.1

ASTM A 182/F11-A182/F12

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	290	20	750	51.7	1500	103.4	2000	137.9	2250	155.2	3750	258.6	6250	431.0	11250	775.9
200	93	260	17.93	750	51.7	1500	103.4	2000	137.9	2250	155.2	3750	258.6	6250	431.0	11250	775.9
300	149	230	15.86	720	49.7	1445	99.7	1925	132.8	2165	149.3	3610	249.0	6015	414.8	10830	746.9
400	204	200	13.79	695	47.9	1385	95.5	1850	127.6	2080	143.4	3465	239.0	5775	398.3	10400	717.2
500	260	170	11.72	665	45.9	1330	91.7	1775	122.4	1995	137.6	3325	229.3	5540	382.1	9965	687.2
600	316	140	9.655	605	41.7	1210	83.4	1615	111.4	1815	125.2	3025	208.6	5040	347.6	9070	625.5
650	343	125	8.621	590	40.7	1175	81.0	1570	108.3	1765	121.7	2940	202.8	4905	338.3	8825	608.6
700	371	110	7.586	570	39.3	1135	78.3	1515	104.5	1705	117.6	2840	195.9	4730	326.2	8515	587.2
750	399	95	6.552	530	36.6	1065	73.4	1420	97.9	1595	110.0	2660	183.4	4430	305.5	7970	549.7
800	427	80	5.517	510	35.2	1015	70.0	1355	93.4	1525	105.2	2540	175.2	4230	291.7	7610	524.8
850	454	65	4.483	485	33.4	975	67.2	1300	89.7	1460	100.7	2435	167.9	4060	280.0	7305	503.8
900	482	50	3.448	450	31.0	900	62.1	1200	82.8	1350	93.1	2245	154.8	3745	258.3	6740	464.8
950	510	35	2.414	320	22.1	640	44.1	850	58.6	955	65.9	1595	110.0	2655	183.1	4785	330.0
1000	538	20	1.379	215	14.8	430	29.7	575	39.7	650	44.8	1080	74.5	1800	124.1	3240	223.4
1050	566	20	1.379	145	10.0	290	20.0	385	26.6	430	29.7	720	49.7	1200	82.8	2160	149.0
1100	593	20	1.379	95	6.6	190	13.1	255	17.6	290	20.0	480	33.1	800	55.2	1440	99.3
1150	621	20	1.379	60	4.1	125	8.6	165	11.4	185	12.8	310	21.4	515	35.5	925	63.8
1200	649	15	1.034	40	2.8	75	5.2	100	6.9	115	7.9	190	13.1	315	21.7	565	39.0

For welding and valves only. Flanged end ratings terminate at 1000°F.

A105: permissible, but not recommended for prolonged usage above about 800°F.
A350/LF2: not to be used over 650°F.
A182/F11-A182/F12: permissible but not recommended for prolonged usage above about 1100°F.

USMANI
TUBES & VALVES CO. PVT. LTD.
MANUFACTURERS OF INDUSTRIAL VALVES

UTVC™

Pressure - Temperature charts

ASTM A182/F22

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	290	20.0	750	51.7	1500	103.4	2000	137.9	2250	155.2	3750	258.6	6250	431.0	11250	775.9
200	93	260	17.9	750	51.7	1500	103.4	2000	137.9	2250	155.2	3750	258.6	6250	431.0	11250	775.9
300	149	230	15.9	730	50.3	1455	100.3	1940	133.8	2185	150.7	3640	251.0	6070	418.6	10925	753.4
400	204	200	13.8	705	48.6	1410	97.2	1880	129.7	2115	145.9	3530	243.4	5880	405.5	10585	730.0
500	260	170	11.7	665	45.9	1330	91.7	1775	122.4	1995	137.6	3325	229.3	5540	382.1	9965	687.2
600	316	140	9.7	605	41.7	1210	83.4	1615	111.4	1815	125.2	3025	208.6	5040	347.6	9070	625.5
650	343	125	8.6	590	40.7	1175	81.0	1570	108.3	1765	121.7	2940	202.8	4905	338.3	8825	608.6
700	371	110	7.6	570	39.3	1135	78.3	1515	104.5	1705	117.6	2840	195.9	4730	326.2	8515	587.2
750	399	95	6.6	530	36.6	1065	73.4	1420	97.9	1595	110.0	2660	183.4	4430	305.5	7970	549.7
800	427	80	5.5	510	35.2	1015	70.0	1355	93.4	1525	105.2	2540	175.2	4230	291.7	7610	524.8
850	454	65	4.5	485	33.4	975	67.2	1300	89.7	1460	100.7	2435	167.9	4060	280.0	7305	503.8
900	482	50	3.4	450	31.0	900	62.1	1200	82.8	1350	93.1	2245	154.8	3745	258.3	6740	464.8
950	510	35	2.4	375	25.9	755	52.1	1005	69.3	1130	77.9	1885	130.0	3145	216.9	5665	390.7
1000	538	20	1.4	260	17.9	520	35.9	695	47.9	780	53.8	1305	90.0	2170	149.7	3910	269.7
1050	566	20	1.4	175	12.1	350	24.1	465	32.1	525	36.2	875	60.3	1455	100.3	2625	181.0
1100	593	20	1.4	110	7.6	220	15.2	295	20.3	330	22.8	550	37.9	915	63.1	1645	113.4
1150	621	20	1.4	70	4.8	135	9.3	180	12.4	205	14.1	345	23.8	570	39.3	1030	71.0
1200	649	20	1.4	40	2.8	80	5.5	110	7.6	125	8.6	205	14.1	345	23.8	615	42.4

ASTM A182/F5

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	290	20,0	750	51,7	1500	103,4	2000	137,9	2250	155,2	3750	258,6	6250	431,0	11250	775,9
200	93	260	17,9	745	51,4	1490	102,8	1985	136,9	2235	154,1	3725	256,9	6205	427,9	11170	770,3
300	149	230	15,9	715	49,3	1430	98,6	1910	131,7	2150	148,3	3580	246,9	5965	411,4	10740	740,7
400	204	200	13,8	705	48,6	1410	97,2	1880	129,7	2115	145,9	3530	243,4	5880	405,5	10585	730,0
500	260	170	11,7	665	45,9	1330	91,7	1775	122,4	1995	137,6	3325	229,3	5540	382,1	9965	687,2
600	316	140	9,7	605	41,7	1210	83,4	1615	111,4	1815	125,2	3025	208,6	5040	347,6	9070	625,5
650	343	125	8,6	590	40,7	1175	81,0	1570	108,3	1765	121,7	2940	202,8	4905	338,3	8825	608,6
700	371	110	7,6	570	39,3	1135	78,3	1515	104,5	1705	117,6	2840	195,9	4730	326,2	8515	587,2
750	399	95	6,6	530	36,6	1055	72,8	1410	97,2	1585	109,3	2640	182,1	4400	303,4	7920	546,2
800	427	80	5,5	510	35,2	1015	70,0	1355	93,4	1525	105,2	2540	175,2	4230	291,7	7610	524,8
850	454	65	4,5	485	33,4	965	66,6	1290	89,0	1450	100,0	2415	166,6	4030	277,9	7250	500,0
900	482	50	3,4	370	25,5	740	51,0	985	67,9	1110	76,6	1850	127,6	3085	212,8	5555	383,1
950	510	35	2,4	275	19,0	550	37,9	735	50,7	825	56,9	1370	94,5	2285	157,6	4115	283,8
1000	538	20	1,4	200	13,8	400	27,6	530	36,6	595	41,0	995	68,6	1655	114,1	2985	205,9
1050	566	20	1,4	145	10,0	290	20,0	385	26,6	430	29,7	720	49,7	1200	82,8	2160	149,0
1100	593	20	1,4	100	6,9	200	13,8	265	18,3	300	20,7	495	34,1	830	57,2	1490	102,8
1150	621	20	1,4	60	4,1	185	12,8	185	12,8	185	12,8	310	21,4	515	35,5	925	63,8
1200	649	20	1,4	35	2,4	105	7,2	105	7,2	105	7,2	170	11,7	285	19,7	515	35,5

For welding end valves only. Flanged end ratings terminate at 1000°F.

A182/F22: permissible, but not recommended for prolonged usage above about 1100°F.

Pressure - Temperature charts

ASTM A182/F9

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	**290**	20,0	**750**	51,7	**1500**	103,4	**2000**	137,9	**2250**	155,2	**3750**	258,6	**6250**	431,0	**11250**	775,9
200	93	**260**	17,9	**750**	51,7	**1500**	103,4	**2000**	137,9	**2250**	155,2	**3750**	258,6	**6250**	431,0	**11250**	775,9
300	149	**230**	15,9	**730**	50,3	**1455**	100,3	**1940**	133,8	**2185**	150,7	**3640**	251,0	**6070**	418,6	**10925**	753,4
400	204	**200**	13,8	**705**	48,6	**1410**	97,2	**1880**	129,7	**2115**	145,9	**3530**	243,4	**5880**	405,5	**10585**	730,0
500	260	**170**	11,7	**665**	45,9	**1330**	91,7	**1775**	122,4	**1995**	137,6	**3325**	229,3	**5540**	382,1	**9965**	687,2
600	316	**140**	9,7	**605**	41,7	**1210**	83,4	**1615**	111,4	**1815**	125,2	**3025**	208,6	**5040**	347,6	**9070**	625,5
650	343	**125**	8,6	**590**	40,7	**1175**	81,0	**1570**	108,3	**1765**	121,7	**2940**	202,8	**4905**	338,3	**8825**	608,6
700	371	**110**	7,6	**570**	39,3	**1135**	78,3	**1515**	104,5	**1705**	117,6	**2840**	195,9	**4730**	326,2	**8515**	587,2
750	399	**95**	6,6	**530**	36,6	**1065**	73,4	**1420**	97,9	**1595**	110,0	**2660**	183,4	**4430**	305,5	**7970**	549,7
800	427	**80**	5,5	**510**	35,2	**1015**	70,0	**1355**	93,4	**1525**	105,2	**2540**	175,2	**4230**	291,7	**7610**	524,8
850	454	**65**	4,5	**485**	33,4	**975**	67,2	**1300**	89,7	**1460**	100,7	**2435**	167,9	**4060**	280,0	**7305**	503,8
900	482	**50**	3,4	**450**	31,0	**900**	62,1	**1200**	82,8	**1350**	93,1	**2245**	154,8	**3745**	258,3	**6740**	464,8
950	510	**35**	2,4	**375**	25,9	**755**	52,1	**1005**	69,3	**1130**	77,9	**1885**	130,0	**3145**	216,9	**5655**	390,0
1000	538	**20**	1,4	**255**	17,6	**505**	34,8	**675**	46,6	**760**	52,4	**1270**	87,6	**2115**	145,9	**3805**	262,4
1050	566	**20**	1,4	**170**	11,7	**345**	23,8	**460**	31,7	**515**	35,5	**855**	59,0	**1430**	98,6	**2570**	177,2
1100	593	**20**	1,4	**115**	7,9	**225**	15,5	**300**	20,7	**340**	23,4	**565**	39,0	**945**	65,2	**1695**	116,9
1150	621	**20**	1,4	**75**	5,2	**150**	10,3	**200**	13,8	**225**	15,5	**375**	25,9	**630**	43,4	**1130**	77,9
1200	649	**20**	1,4	**50**	3,4	**105**	7,2	**140**	9,7	**155**	10,7	**255**	17,6	**430**	29,7	**770**	53,1

For welding end valves only. Flanged end ratings terminate at 1000°F.

ASTM A182/F304

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	**275**	19,0	**720**	49,7	**1440**	99,3	**1920**	132,4	**2160**	149,0	**3600**	248,3	**6000**	413,8	**10800**	744,8
200	93	**230**	15,9	**600**	41,4	**1200**	82,8	**1600**	110,3	**1800**	124,1	**3000**	206,9	**5000**	344,8	**9000**	620,7
300	149	**205**	14,1	**540**	37,2	**1080**	74,5	**1440**	99,3	**1620**	111,7	**2700**	186,2	**4500**	310,3	**8100**	558,6
400	204	**190**	13,1	**495**	34,1	**995**	68,6	**1325**	91,4	**1490**	102,8	**2485**	171,4	**4140**	285,5	**7450**	513,8
500	260	**170**	11,7	**465**	32,1	**930**	64,1	**1240**	85,5	**1395**	96,2	**2330**	160,7	**3880**	267,6	**6985**	481,7
600	316	**140**	9,7	**435**	30,0	**875**	60,3	**1165**	80,3	**1310**	90,3	**2185**	150,7	**3640**	251,0	**6550**	451,7
650	343	**125**	8,6	**430**	29,7	**860**	59,3	**1145**	79,0	**1290**	89,0	**2150**	148,3	**3580**	246,9	**6445**	444,5
700	371	**110**	7,6	**425**	29,3	**850**	58,6	**1135**	78,3	**1275**	87,9	**2125**	146,6	**3540**	244,1	**6370**	439,3
750	399	**95**	6,6	**415**	28,6	**830**	57,2	**1105**	76,2	**1245**	85,9	**2075**	143,1	**3460**	238,6	**6230**	429,7
800	427	**80**	5,5	**405**	27,9	**805**	55,5	**1075**	74,1	**1210**	83,4	**2015**	139,0	**3360**	231,7	**6050**	417,2
850	454	**65**	4,5	**395**	27,2	**790**	54,5	**1055**	72,8	**1190**	82,1	**1980**	136,6	**3300**	227,6	**5940**	409,7
900	482	**50**	3,4	**390**	26,9	**780**	53,8	**1035**	71,4	**1165**	80,3	**1945**	134,1	**3240**	223,4	**5830**	402,1
950	510	**35**	2,4	**380**	26,2	**765**	52,8	**1020**	70,3	**1145**	79,0	**1910**	131,7	**3180**	219,3	**5725**	394,8
1000	538	**20**	1,4	**320**	22,1	**640**	44,1	**855**	59,0	**965**	66,6	**1605**	110,7	**2675**	184,5	**4815**	332,1
1050	566	**20**	1,4	**310**	21,4	**615**	42,4	**820**	56,6	**925**	63,8	**1545**	106,6	**2570**	177,2	**4630**	319,3
1100	593	**20**	1,4	**255**	17,6	**515**	35,5	**685**	47,2	**770**	53,1	**1285**	88,6	**2145**	147,9	**3855**	265,9
1150	621	**20**	1,4	**200**	13,8	**400**	27,6	**530**	36,6	**595**	41,0	**995**	68,6	**1655**	114,1	**2985**	205,9
1200	649	**20**	1,4	**155**	10,7	**310**	21,4	**415**	28,6	**465**	32,1	**770**	53,1	**1285**	88,6	**2315**	159,7
1250	677	**20**	1,4	**115**	7,9	**225**	15,5	**300**	20,7	**340**	23,4	**565**	39,0	**945**	65,2	**1695**	116,9
1300	704	**20**	1,4	**85**	5,9	**170**	11,7	**225**	15,5	**255**	17,6	**430**	29,7	**715**	49,3	**1285**	88,6
1350	732	**20**	1,4	**60**	4,1	**125**	8,6	**165**	11,4	**185**	12,8	**310**	21,4	**515**	35,5	**925**	63,8
1400	760	**20**	1,4	**50**	3,4	**95**	6,6	**130**	9,0	**145**	10,0	**240**	16,6	**400**	27,6	**720**	49,7
1450	788	**15**	1,0	**35**	2,4	**70**	4,8	**95**	6,6	**105**	7,2	**170**	11,7	**285**	19,7	**515**	35,5
1500	816	**10**	0,7	**25**	1,7	**55**	3,8	**70**	4,8	**80**	5,5	**135**	9,3	**230**	15,9	**410**	28,3

For welding end valves only. Flanged end ratings terminate at 1000°F.

Pressure - Temperature charts

ASTM A182/F316

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	275	19,0	720	49,7	1440	99,3	1920	132,4	2160	149,0	3600	248,3	6000	413,8	10800	744,8
200	93	235	16,2	620	42,8	1240	85,5	1655	114,1	1860	128,3	3095	213,4	5160	355,9	9290	640,7
300	149	215	14,8	560	38,6	1120	77,2	1495	103,1	1680	115,9	2795	192,8	4660	321,4	8390	578,6
400	204	195	13,4	515	35,5	1025	70,7	1370	94,5	1540	106,2	2570	177,2	4280	295,2	7705	531,4
500	260	170	11,7	480	33,1	955	65,9	1275	87,9	1435	99,0	2390	164,8	3980	274,5	7165	494,1
600	316	140	9,7	450	31,0	900	62,1	1205	83,1	1355	93,4	2255	155,5	3760	259,3	6770	466,9
650	343	125	8,6	445	30,7	890	61,4	1185	81,7	1330	91,7	2220	153,1	3700	255,2	6660	459,3
700	371	110	7,6	430	29,7	870	60,0	1160	80,0	1305	90,0	2170	149,7	3620	249,7	6515	449,3
750	399	95	6,6	425	29,3	855	59,0	1140	78,6	1280	88,3	2135	147,2	3560	245,5	6410	442,1
800	427	80	5,5	420	29,0	845	58,3	1125	77,6	1265	87,2	2110	145,5	3520	242,8	6335	436,9
850	454	65	4,5	420	29,0	835	57,6	1115	76,9	1255	86,6	2090	144,1	3480	240,0	6265	432,1
900	482	50	3,4	415	28,6	830	57,2	1105	76,2	1245	85,9	2075	143,1	3460	238,6	6230	429,7
950	510	35	2,4	385	26,6	775	53,4	1030	71,0	1160	80,0	1930	133,1	3220	222,1	5795	399,7
1000	538	20	1,4	350	24,1	700	48,3	935	64,5	1050	72,4	1750	120,7	2915	201,0	5245	361,7
1050	566	20	1,4	345	23,8	685	47,2	915	63,1	1030	71,0	1720	118,6	2865	197,6	5155	355,5
1100	593	20	1,4	305	21,0	610	42,1	815	56,2	915	63,1	1525	105,2	2545	175,5	4575	315,5
1150	621	20	1,4	235	16,2	475	32,8	630	43,4	710	49,0	1185	81,7	1970	135,9	3550	244,8
1200	649	20	1,4	185	12,8	370	25,5	495	34,1	555	38,3	925	63,8	1545	106,6	2775	191,4
1250	677	20	1,4	145	10,0	295	20,3	390	26,9	440	30,3	735	50,7	1230	84,8	2210	152,4
1300	704	20	1,4	115	7,9	235	16,2	310	21,4	350	24,1	585	40,3	970	66,9	1750	120,7
1350	732	20	1,4	95	6,6	190	13,1	255	17,6	290	20,0	480	33,1	800	55,2	1440	99,3
1400	760	20	1,4	75	5,2	150	10,3	200	13,8	225	15,5	380	26,2	630	43,4	1130	77,9
1450	788	20	1,4	60	4,1	115	7,9	155	10,7	175	12,1	290	20,0	485	33,4	875	60,3
1500	816	20	1,4	40	2,8	85	5,9	110	7,6	125	8,6	205	14,1	345	23,8	620	42,8

For welding end valves only. Flanged end ratings terminate at 1000°F.

ASTM A182/F304L - A182/F316L

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	230	15,9	600	41,4	1200	82,8	1600	110,3	1800	124,1	3000	206,9	5000	344,8	9000	620,7
200	93	195	13,4	505	34,8	1015	70,0	1350	93,1	1520	104,8	2530	174,5	4220	291,0	7595	523,8
300	149	175	12,1	455	31,4	910	62,8	1210	83,4	1360	93,8	2270	156,6	3780	260,7	6805	469,3
400	204	160	11,0	415	28,6	825	56,9	1100	75,9	1240	85,5	2065	142,4	3440	237,2	6190	426,9
500	260	145	10,0	380	26,2	765	52,8	1020	70,3	1145	79,0	1910	131,7	3180	219,3	5725	394,8
600	316	140	9,7	360	24,8	720	49,7	960	66,2	1080	74,5	1800	124,1	3000	206,9	5400	372,4
650	343	125	8,6	350	24,1	700	48,3	935	64,5	1050	72,4	1750	120,7	2920	201,4	5255	362,4
700	371	110	7,6	345	23,8	685	47,2	915	63,1	1030	71,0	1715	118,3	2860	197,2	5150	355,2
750	399	95	6,6	335	23,1	670	46,2	895	61,7	1010	69,7	1680	115,9	2800	193,1	5040	347,6
800	427	80	5,5	330	22,8	660	45,5	875	60,3	985	67,9	1645	113,4	2740	189,0	4930	340,0
850	454	65	4,5	320	22,1	645	44,5	860	59,3	965	66,6	1610	111,0	2680	184,8	4825	332,8

Pressure - Temperature charts

ASTM A182/F321

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	275	19,0	720	49,7	1440	99,3	1920	132,4	2160	149,0	3600	248,3	6000	413,8	10800	744,8
200	93	245	16,9	645	44,5	1290	89,0	1720	118,6	1935	133,4	3230	222,8	5380	371,0	9685	667,9
300	149	230	15,9	595	41,0	1190	82,1	1585	109,3	1785	123,1	2975	205,2	4960	342,1	8930	615,9
400	204	200	13,8	550	37,9	1105	76,2	1470	101,4	1655	114,1	2760	190,3	4600	317,2	8280	571,0
500	260	170	11,7	515	35,5	1030	71,0	1375	94,8	1545	106,6	2570	177,2	4285	295,5	7715	532,1
600	316	140	9,7	485	33,4	975	67,2	1300	89,7	1460	100,7	2435	167,9	4060	280,0	7310	504,1
650	343	125	8,6	480	33,1	955	65,9	1275	87,9	1435	99,0	2390	164,8	3980	274,5	7165	494,1
700	371	110	7,6	465	32,1	930	64,1	1240	85,5	1395	96,2	2330	160,7	3880	267,6	6985	481,7
750	399	95	6,6	460	31,7	915	63,1	1220	84,1	1375	94,8	2290	157,9	3820	263,4	6875	474,1
800	427	80	5,5	450	31,0	900	62,1	1203,3	83,0	1355	93,4	2255	155,5	3760	259,3	6770	466,9
850	454	65	4,5	445	30,7	895	61,7	1190	82,1	1340	92,4	2230	153,8	3720	256,6	6695	461,7
900	482	50	3,4	440	30,3	885	61,0	1180	81,4	1325	91,4	2210	152,4	3680	253,8	6625	456,9
950	510	35	2,4	385	26,6	775	53,4	1030	71,0	1160	80,0	1930	133,1	3220	222,1	5795	399,7
1000	538	20	1,4	355	24,5	715	49,3	950	65,5	1070	73,8	1785	123,1	2970	204,8	5350	369,0
1050	566	20	1,4	315	21,7	625	43,1	835	57,6	940	64,8	1565	107,9	2605	179,7	4690	323,4
1100	593	20	1,4	270	18,6	545	37,6	725	50,0	815	56,2	1360	93,8	2265	156,2	4075	281,0
1150	621	20	1,4	235	16,2	370	25,5	595	41,0	710	49,0	1185	81,7	1970	135,9	3550	244,8
1200	649	20	1,4	185	12,8	365	25,2	490	33,8	555	38,3	925	63,8	1545	106,6	2775	191,4
1250	677	20	1,4	140	9,7	280	19,3	375	25,9	420	29,0	705	48,6	1170	80,7	2110	145,5
1300	704	20	1,4	110	7,6	220	15,2	295	20,3	330	22,8	550	37,9	915	63,1	1645	113,4
1350	732	20	1,4	85	5,9	170	11,7	225	15,5	255	17,6	430	29,7	715	49,3	1285	88,6
1400	760	20	1,4	65	4,5	130	9,0	175	12,1	195	13,4	325	22,4	545	37,6	975	67,2
1450	788	20	1,4	50	3,4	105	7,2	140	9,7	155	10,7	255	17,6	430	29,7	770	53,1
1500	816	20	1,4	40	2,8	75	5,2	100	6,9	115	7,9	190	13,1	315	21,7	565	39,0

For welding end valves only.
Flanged end ratings terminate at 1000°F.

ASTM A182/F347

°F	°C	150	PN20	300	PN50	600	PN100	800	PN130	900	PN150	1500	PN250	2500	PN420	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
100	38	275	19,0	720	49,7	1440	99,3	1920	132,4	2160	149,0	3600	248,3	6000	413,8	10800	744,8
200	93	255	17,6	660	45,5	1320	91,0	1760	121,4	1980	136,6	3300	227,6	5500	379,3	9900	682,8
300	149	230	15,9	615	42,4	1230	84,8	1640	113,1	1845	127,2	3070	211,7	5120	353,1	9215	635,5
400	204	200	13,8	575	39,7	1145	79,0	1530	105,5	1720	118,6	2870	197,9	4780	329,7	8615	594,1
500	260	170	11,7	540	37,2	1080	74,5	1440	99,3	1620	111,7	2700	186,2	4500	310,3	8100	558,6
600	316	140	9,7	515	35,5	1025	70,7	1370	94,5	1540	106,2	2570	177,2	4280	295,2	7705	531,4
650	343	125	8,6	505	34,8	1010	69,7	1345	92,8	1510	104,1	2520	173,8	4200	289,7	7560	521,4
700	371	110	7,6	495	34,1	990	68,3	1320	91,0	1485	102,4	2470	170,3	4120	284,1	7415	511,4
750	399	95	6,6	490	33,8	985	67,9	1310	90,3	1475	101,7	2460	169,7	4100	282,8	7380	509,0
800	427	80	5,5	485	33,4	975	67,2	1300	89,7	1460	100,7	2435	167,9	4060	280,0	7310	504,1
850	454	65	4,5	485	33,4	970	66,9	1295	89,3	1455	100,3	2425	167,2	4040	278,6	7270	501,4
900	482	50	3,4	450	31,0	900	62,1	1200	82,8	1350	93,1	2245	154,8	3745	258,3	6740	464,8
950	510	35	2,4	385	26,6	775	53,4	1030	71,0	1160	80,0	1930	133,1	3220	222,1	5795	399,7
1000	538	20	1,4	365	25,2	725	50,0	970	66,9	1090	75,2	1820	125,5	3030	209,0	5450	375,9
1050	566	20	1,4	360	24,8	720	49,7	960	66,2	1080	74,5	1800	124,1	3000	206,9	5400	372,4
1100	593	20	1,4	325	22,4	645	44,5	860	59,3	965	66,6	1610	111,0	2685	185,2	4835	333,4
1150	621	20	1,4	275	19,0	550	37,9	735	50,7	825	56,9	1370	94,5	2285	157,6	4115	283,8
1200	649	20	1,4	170	11,7	345	23,8	460	31,7	515	35,5	855	59,0	1430	98,6	2570	177,2
1250	677	20	1,4	125	8,6	245	16,9	330	22,8	370	25,5	615	42,4	1030	71,0	1850	127,6
1300	704	20	1,4	95	6,6	185	12,8	250	17,2	280	19,3	465	32,1	770	53,1	1390	95,9
1350	732	20	1,4	70	4,8	135	9,3	180	12,4	205	14,1	345	23,8	570	39,3	1030	71,0
1400	760	20	1,4	50	3,4	110	7,6	145	10,0	165	11,4	275	19,0	455	31,4	825	56,9
1450	788	15	1,0	40	2,8	80	5,5	110	7,6	125	8,6	205	14,1	345	23,8	615	42,4
1500	816	15	1,0	35	2,4	70	4,8	95	6,6	105	7,2	170	11,7	285	19,7	515	35,5

For welding end valves only. Flanged end ratings terminate at 1000°F.

A182/F321-A182-F347: not to be used over 1000°F.

Pressure Temperature Ratings

ASME B 16.34
Maximum Allowable Non-Shock Pressure, psig / kg / cm2 g.

Service Temperature		Class 150					Class 300					Class 600				
F	C	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)
-20 to 100	-29 to 38	285	265	290	290	290	740	695	750	750	750	1480	1390	1500	1500	1500
200	93	260	260	260	260	260	675	680	750	750	745	1350	1360	1500	1500	1490
300	149	230	230	230	230	230	655	655	720	730	715	1315	1305	1445	1455	1430
400	204	200	200	200	200	200	635	640	695	705	705	1270	1280	1385	1410	1410
500	260	170	170	170	170	170	600	620	665	665	665	1200	1245	1330	1330	1330
600	316	140	140	140	140	140	550	605	605	605	605	1095	1210	1210	1210	1210
650	343	125	125	125	125	125	535	590	590	590	590	1075	1175	1175	1175	1175
700	371	110	110	110	110	110	535	570	570	570	570	1065	1135	1135	1135	1135
750	399	95	95	95	95	95	505	530	530	530	530	1010	1065	1065	1065	1055
800	427	80	80	80	80	80	410	510	510	510	510	825	1015	1015	1015	1015
850	454	65	65	65	65	65	270	485	485	485	485	535	975	975	975	965
900	482	50	50	50	50	50	170	450	450	450	370	345	900	900	900	740
950	510	35	35	35	35	35	105	280	320	375	275	205	560	640	755	550
1000	538	20	20	20	20	20	50	165	215	260	200	105	330	430	520	400
1050	566			20*	20*	20*			145	175	145			290	350	290
1100	593			20*	20*	20*			95	110	100			190	220	200
1150	621					20*					60					125
1200	649					15*					35					70
Hydrostatic Shell Test pressure		450 31.5	425 29	450 31.5			1125 79	1075 75	1150 805			2250 157.5	2100 147	275 154		
Valve Closure Test Pressure	Fluid	315 22.00	300 21.00	320 22.5			825 58	770 54	830 58			1630 114	1535 107	1655 116		
	AIR	100 / 7					100 / 7					100 / 7				

Service Temperature		Class 900					Class 1500					Class 2500				
F	C	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)	WCB (a)	WC1 (b)(c.)	WC6 (c.)	WC9 (c.)	C5 (c.)
-20 to 100	-29 to 38	2220	2085	2250	2250	2250	3705	3470	3750	3750	3750	6170	5785	6250	6250	6250
200	93	2025	2035	2250	2250	2235	3375	3395	3750	3750	3725	5625	5660	6250	6250	6205
300	149	1970	1955	2165	2185	2150	3280	3260	3610	3640	3580	5470	5435	6015	6070	5965
400	204	1900	1920	2080	2115	2115	3170	3200	3465	3530	3530	5280	5330	5775	5880	5880
500	260	1795	1865	1995	1995	1995	2995	3105	3425	3325	3325	4990	5180	5540	5540	5540
600	316	1640	1815	1815	1815	1815	2735	3025	3025	3025	3025	4560	5040	5040	5040	5040
650	343	1610	1765	1765	1765	1765	2685	2940	2940	2940	2940	4475	4905	4905	4905	4905
700	371	1600	1705	1705	1705	1705	2665	2840	2840	2840	2840	4440	4730	4730	4730	4730
750	399	1510	1595	1595	1595	1585	2520	2660	2660	2660	2640	4200	4430	4430	4430	4400
800	427	1235	1525	1525	1525	1525	2060	2540	240	2540	2540	3430	4230	4230	4230	4230
850	454	805	1460	1460	1460	1450	1340	2435	2435	2435	2415	2230	4060	4060	4060	4030
900	482	515	1350	1350	1350	1110	860	2245	2245	2245	1850	1430	3745	3745	3745	3085
950	510	310	845	955	1130	825	515	1405	1595	1885	1370	860	2345	2645	3145	2285
1000	538	155	495	650	780	959	260	825	1080	1305	995	430	1370	1800	2170	1655
1050	566			430	525	430			720	875	720			1200	1455	1200
1100	593			290	330	300			480	550	495			800	915	830
1150	621				205	185					310					515
1200	649				125	105					170					285
Hydrostatic Shell Test pressure		3350 235	3150 220.5	3375 236.5			5575 390	5525 387	5650 390			9275 650	8700 609	9375 656		
Valve Closure Test Pressure	Fluid	2445 171	2295 160.5	2475 173			4080 286	3817 267	4130 280			6780 475	6365 445	6875 481		
	AIR	100 / 7					100 / 7					100 / 7				

Notes: (a) --- Permissible, but not recommended for prolonged usage above 800 F. Upon prolonged exposure to temperature above 800° F, the carbide phase of carbon steel may be converted to graphite.
(b) --- Permissible, but not recommended for prolonged usage above 850° F.
(c) --- Use normalized and tempered material only.
* For welding end valves only. Flanged end ratings terminate at 1,000° F.

GATE VALVES-800-Bolted Bonnet-Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

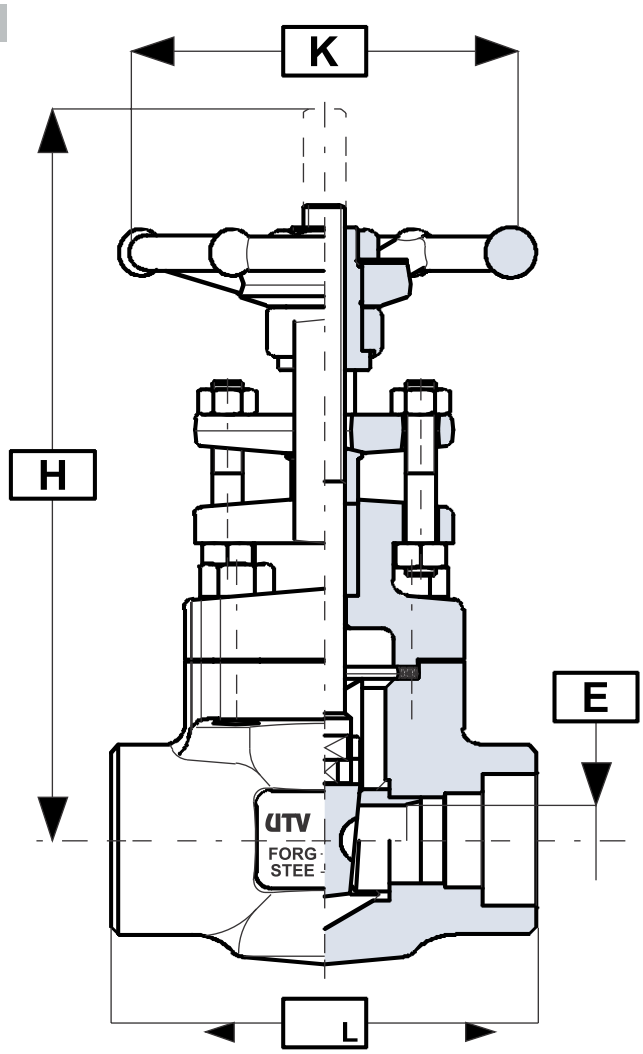
Hydraulic: *(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-BS 6755 (Pt.1)

Connections

SW	Socket weld
TH	Threaded NPT
TS	Sw/NPT
SE	Sw(e)/NPT
SU	Sw(u)/NPT
B4	Butt weld 40
B8	Butt weld 80



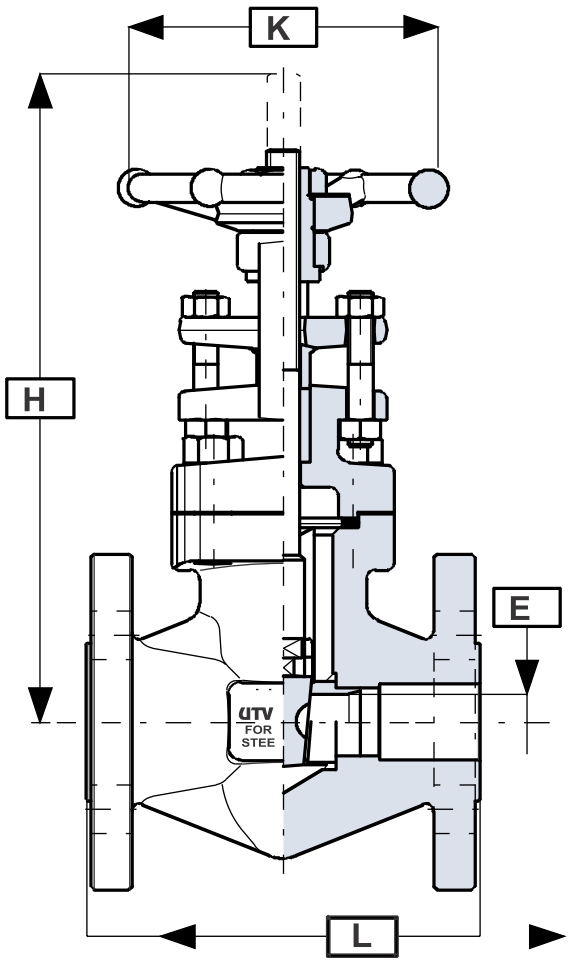
CONVENTIONAL BORE

	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L (mm/in)	**80** 3,15	**90** 3,54	**110** 4,33	**127** 5,00	**127** 5,00	**130** 5,12
H (mm/in)	**145** 5,70	**156** 6,14	**186** 7,32	**216** 8,50	**255** 10,04	**273** 10,75
K (mm/in)	**90** 3,54	**90** 3,54	**100** 3,94	**120** 4,72	**140** 5,51	**140** 5,51
E (mm/in)	**10** 0,39	**14** 0,55	**18** 0,71	**24** 0,95	**31** 1,22	**36,5** 1,44
Wt. (kg/lb)	**1,7** 3,74	**2,1** 4,62	**3,3** 7,3	**5,2** 11,4	**7,0** 15,4	**9,1** 20,0
Catal. no.						

FULL BORE

	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L (mm/in)	**80** 3,15	**80** 3,15	**90** 3,54	**110** 4,33	**127** 5,00	**127** 5,00	**130** 5,12	**150** 5,91
H (mm/in)	**143** 5,63	**145** 5,71	**156** 6,14	**186** 7,32	**216** 8,50	**255** 10,04	**273** 10,75	**334** 13,15
K (mm/in)	**90** 3,54	**90** 3,54	**90** 3,54	**100** 3,94	**120** 4,72	**140** 5,51	**140** 5,51	**200** 7,87
E (mm/in)	**8,5** 0,33	**10** 0,39	**14** 0,55	**18** 0,71	**24** 0,94	**31** 1,22	**36,5** 1,44	**48** 1,89
Wt. (kg/lb)	**1,8** 4,0	**1,8** 4,0	**2,2** 4,8	**3,4** 7,5	**5,3** 11,7	**7,1** 15,6	**9,2** 20,2	**14,2** 31,2
Catal. no.								

GATE VALVES-150-Bolted Bonnet-Flanged End



Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

150 p.s.i. @ 550°F
285 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 450 p.s.i.
Seat - 325 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	API 598-BS 6755 (Pt.1)

Connections

RF Raised face (std.)
FF Flat finish

CONVENTIONAL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			107,9 4,25	117,5 4,63	127,0 5,00		165,1 6,50	177,8 7,00
H (mm/in)			179 7,05	186 7,32	208 8,19		255 10,04	273 10,75
K (mm/in)			90 3,54	90 3,54	100 3,94		140 5,51	140 5,51
E (mm/in)			10 0,39	14 0,55	18 0,71		31 1,22	36,5 1,44
Wt. (kg/lb)			3,2 7,0	4,1 9,0	5,8 12,8		10 22,0	13,1 28,8
Catal. no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			107,9 4,25	117,5 4,63	127,0 5,00		165,1 6,50	177,8 7,00
H (mm/in)			183 7,20	191 7,52	216 8,50		273 10,75	314 12,36
K (mm/in)			90 3,54	90 3,54	100 3,94		140 5,51	200 7,87
E (mm/in)			14 0,55	18 0,71	24 0,94		36,5 1,44	48 1,89
Wt. (kg/lb)			3,1 6,8	4 8,8	5,7 12,5		12,6 27,7	15,8 34,8
Catal. no.								

GATE VALVES-300-Bolted Bonnet-Flanged End

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

300 p.s.i. @ 850°F
740 p.s.i. @ 100°F

Test pressure (ASTM A105)

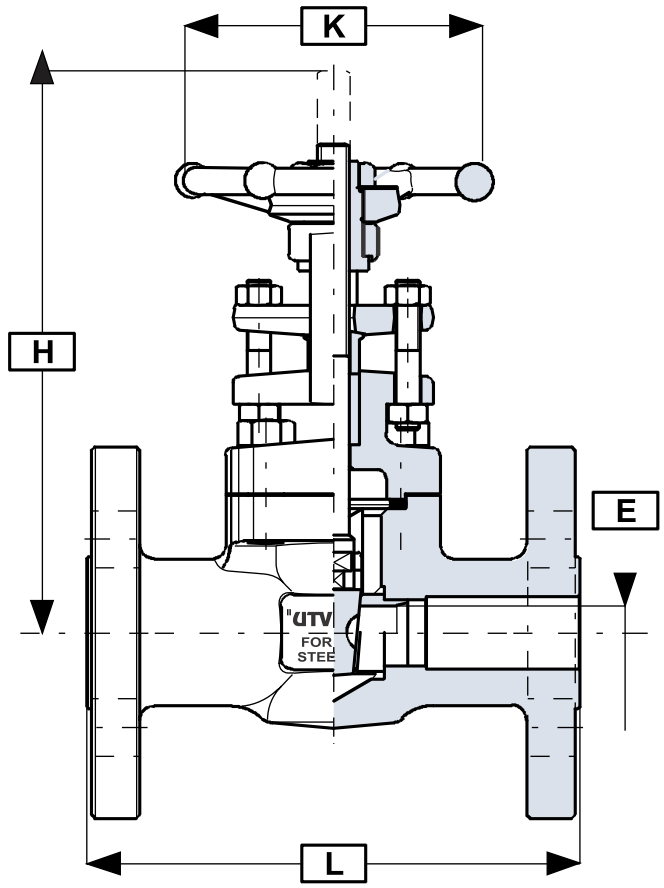
Hydraulic:*(minimum)*
Body - 1125 p.s.i.
Seat - 825 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	API 598-BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		



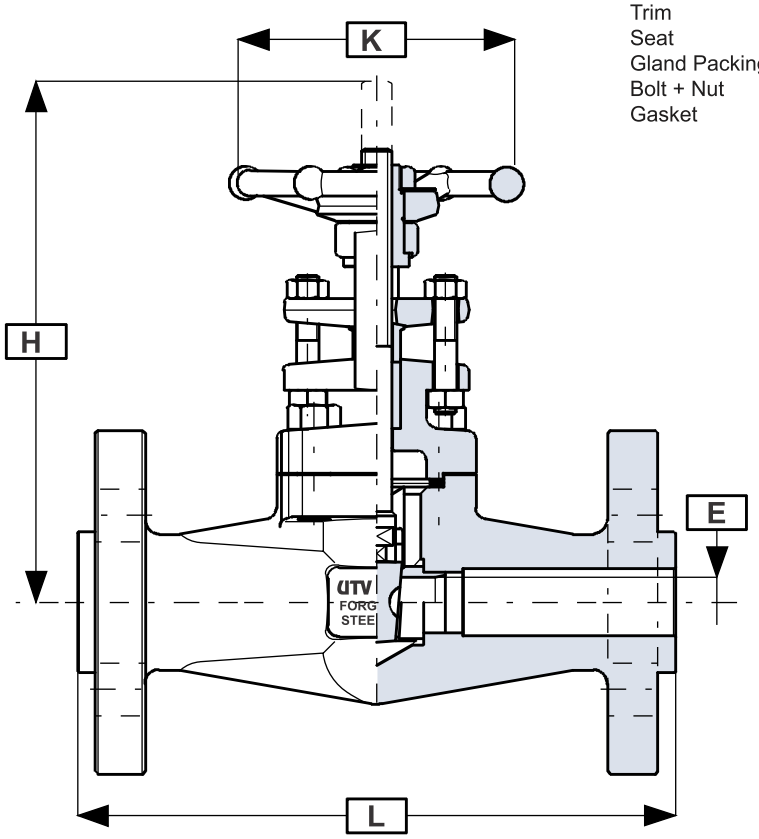
CONVENTIONAL BORE

			1/2"		3/4"		1"		1.1/2"		2"	
L (mm/in)			**139,7**	5,50	**152,4**	6,00	**165,1**	6,50	**190,5**	7,50	**215,9**	8,50
H (mm/in)			**145**	5,71	**156**	6,14	**186**	7,32	**255**	10,04	**273**	10,75
K (mm/in)			**90**	3,54	**90**	3,54	**100**	3,94	**140**	5,51	**140**	5,51
E (mm/in)			**10**	0,39	**14**	0,55	**18**	0,71	**31**	1,22	**36,5**	1,44
Wt. (kg/lb)			**3,8**	8,4	**5,4**	11,9	**6,5**	14,3	**13,1**	28,8	**17,3**	38,1
Catal. no.												

FULL BORE

			1/2"		3/4"		1"		1.1/2"		2"	
L (mm/in)			**139,7**	5,50	**152,4**	6,00	**165,1**	6,5	**190,5**	7,50	**215,9**	8,50
H (mm/in)			**193**	7,60	**190**	7,48	**216**	8,50	**273**	10,75	**314**	12,36
K (mm/in)			**90**	3,54	**100**	3,94	**120**	4,72	**140**	5,51	**200**	7,87
E (mm/in)			**14**	0,55	**18**	0,71	**24**	0,94	**36,5**	1,44	**48**	1,89
Wt. (kg/lb)			**4,5**	9,9	**6,0**	13,2	**7,6**	16,7	**14,0**	32,6	**18,8**	41,4
Catal. no.												

GATE VALVES-600-Bolted Bonnet-Flanged End RF/RJ



Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22,
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

600 p.s.i. @ 850°F
1480 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 2225 p.s.i.
Seat - 1650 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	API 598-BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small grove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		

CONVENTIONAL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**145** 5,71	**156** 6,14	**186** 7,32		**255** 10,04	**273** 10,75
K (mm/in)			**90** 3,54	**90** 3,54	**100** 3,94		**140** 5,51	**140** 5,51
E (mm/in)			**10** 0,39	**14** 0,55	**18** 0,71		**31** 1,22	**36,5** 1,44
Wt. (kg/lb)			**3,5** 7,7	**5,8** 12,8	**7,4** 16,3		**14,3** 31,5	**18,8** 41,4
Catal. no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**176** 6,93	**206** 8,11	**216** 8,50		**255** 10,04	**334** 13,15
K (mm/in)			**90** 3,54	**100** 3,94	**120** 4,72		**140** 5,51	**200** 7,87
E (mm/in)			**14** 0,55	**18** 0,71	**24** 0,94		**34** 1,34	**48** 1,89
Wt. (kg/lb)			**3,9** 8,6	**7,0** 15,4	**10,3** 22,7		**16,5** 36,3	**25,0** 55,0
Catal. no.								

GATE VALVES-1500/2500-Bolted Bonnet-Flanged End RF/RJ

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H

Ratings (ASTM A105)

1500 p.s.i. @ 850°F
3705 p.s.i. @ 100°F

Test pressure (ASTM A105) 1500#-2500#

Hydraulic: *(minimum)*
Body - 5575 p.s.i.
Seat - 4100 p.s.i.
Air under water:
Seat - 85 p.s.i.

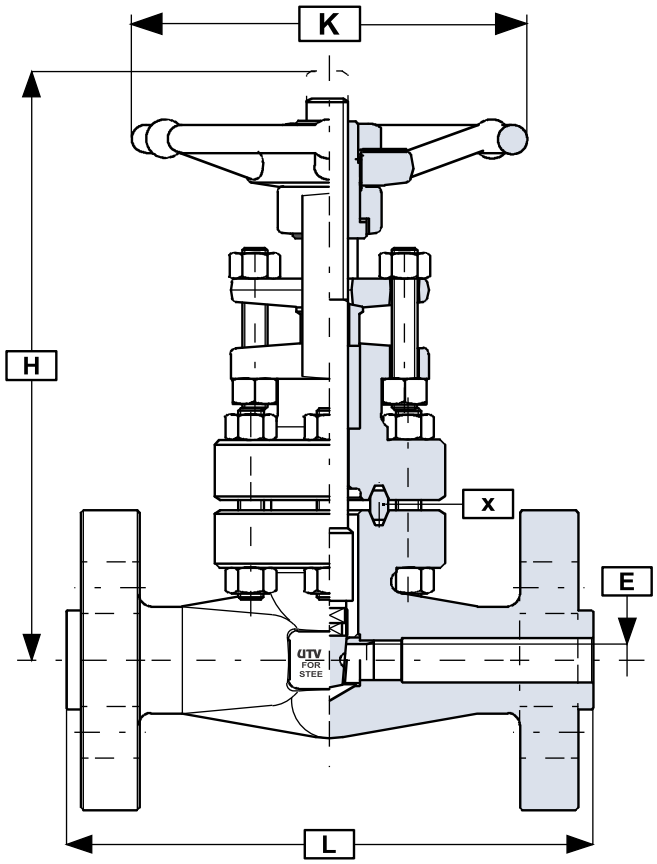
Hydraulic: *(minimum)*
Body - 9275 p.s.i.
Seat - 6800 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	API 598-ASME B16.34

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		



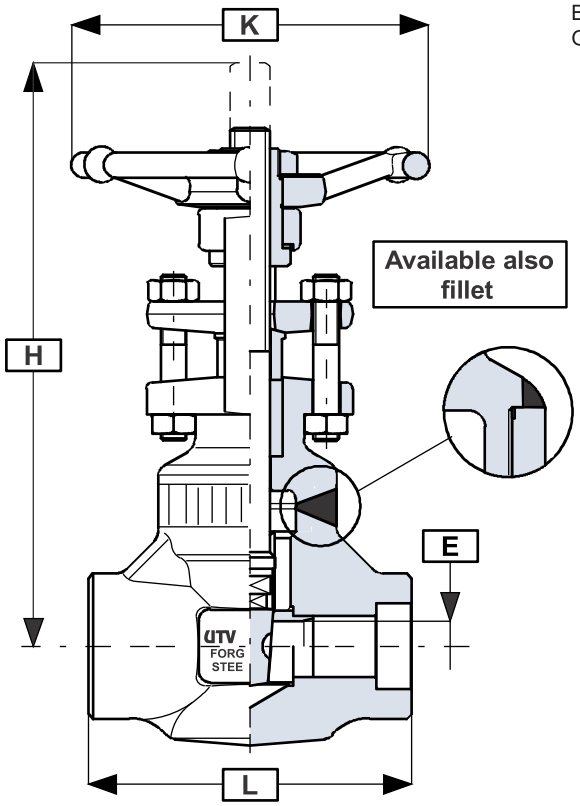
STANDARD BORE 1500#

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**215,9** 8,50	**228,6** 9,00	**254,0** 10,00		**304,8** 12,00	**368,3** 14,50
H (mm/in)			**212** 8,35	**256** 10,08	**272** 10,71		**411** 16,18	**422** 16,61
K (mm/in)			**120** 4,72	**175** 6,89	**175** 6,89		**260** 10,24	**260** 10,24
E (mm/in)			**11,5** 0,45	**15** 0,59	**19,5** 0,77		**32** 1,26	**40** 1,57
Wt.(kg/lb)			**9,7** 21,3	**15,5** 34,1	**17,5** 38,5		**38,5** 84,7	**56,0** 123,2
Catal.no.								

STANDARD BORE 2500#

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**263,5** 10,37	**273,0** 10,75	**308,0** 12,13		**384,2** 15,13	**450,8** 17,75
H (mm/in)			**212** 8,35	**256** 10,08	**272** 10,71		**411** 16,18	**422** 16,61
K (mm/in)			**140** 5,51	**200** 7,87	**200** 7,87		**260** 10,24	**350** 13,77
E (mm/in)			**10** 0,39	**14** 0,55	**18** 0,71		**31** 12,21	**36,5** 1,44
Wt.(kg/lb)			**9,9** 21,8	**15,8** 34,8	**17,9** 39,4		**39,1** 86,3	**56,8** 125,0
Catal.no.								

GATE VALVES-800# Welded Bonnet - SW/NPT/BW



Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic:*(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-BS 6755 (Pt.1)

Connections

SW	Socket weld
TH	Threaded NPT
TS	Sw/NPT
SE	Sw(e)/NPT
SU	Sw(u)/NPT
B4	Butt weld 40
B8	Butt weld 80

CONVENTIONAL BORE

			1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
L	(mm/in)		**80**	3.15	**90**	3.54	**110**	4.33	**127**	5.00	**127**	5.00	**130**	5.12
H	(mm/in)		**153**	5.91	**157**	6.18	**188**	7.40	**220**	8.66	**248**	9.76	**274**	10.79
K	(mm/in)		**90**	3.54	**90**	3.54	**100**	3.94	**120**	4.72	**140**	5.51	**140**	5.51
E	(mm/in)		**10**	0.39	**14**	0.55	**18**	0.71	**24**	0.94	**31**	1.22	**36.5**	1.44
Wt.	(kg/lb)		**1.4**	3.1	**1.7**	3.7	**2.8**	6.2	**4.4**	9.7	**6.8**	15.0	**7.6**	16.7
Catal. no.														

FULL BORE

		1/4"		3/8"		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
L	(mm/in)	**80**	3.15	**80**	3.15	**99**	3.54	**110**	4.33	**127**	5.00	**127**	5.00	**130**	5.12	**150**	5.91
H	(mm/in)	**150**	5.91	**150**	5.91	**157**	6.18	**179**	7.05	**220**	8.66	**248**	9.76	**274**	10.79	**334**	13.15
K	(mm/in)	**90**	3.54	**90**	3.54	**90**	3.54	**100**	3.94	**120**	4.72	**140**	5.51	**140**	5.51	**200**	7.87
E	(mm/in)	**8.5**	0.33	**10**	0.39	**14**	0.55	**17.5**	0.71	**24**	0.94	**31**	1.22	**36.5**	1.44	**48**	1.9
Wt.	(kg/lb)	**1.5**	3.3	**1.5**	3.3	**1.8**	4.0	**3.0**	6.4	**4.5**	9.9	**5.7**	12.5	**7.7**	16.9	**12.2**	26.8
Catal. no.																	

GATE VALVES-1500#-Welded Bonnet-Socket Weld, Butt Welded

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

1500 p.s.i. @ 850°F
3705 p.s.i. @ 100°F

Test pressure (ASTM A105)

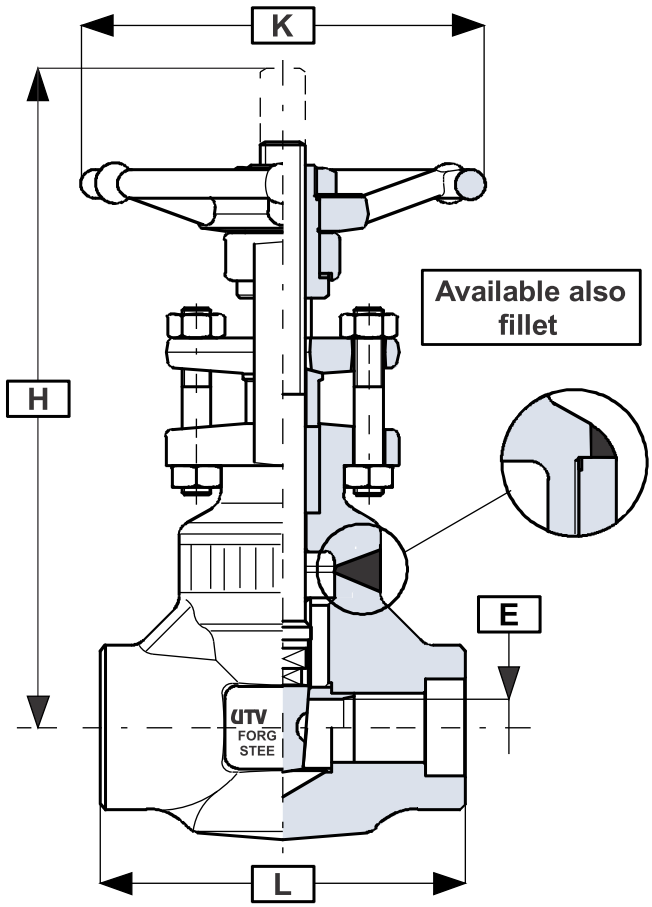
Hydraulic: *(minimum)*
Body - 5575 p.s.i.
Seat - 4100 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld	**B8**	Butt weld 80
TH	threaded NPT		
TS	Sw/NPT		
SE	Sw(e)/NPT		
SU	Sw(u)/NPT		
B6	Butt weld 160		

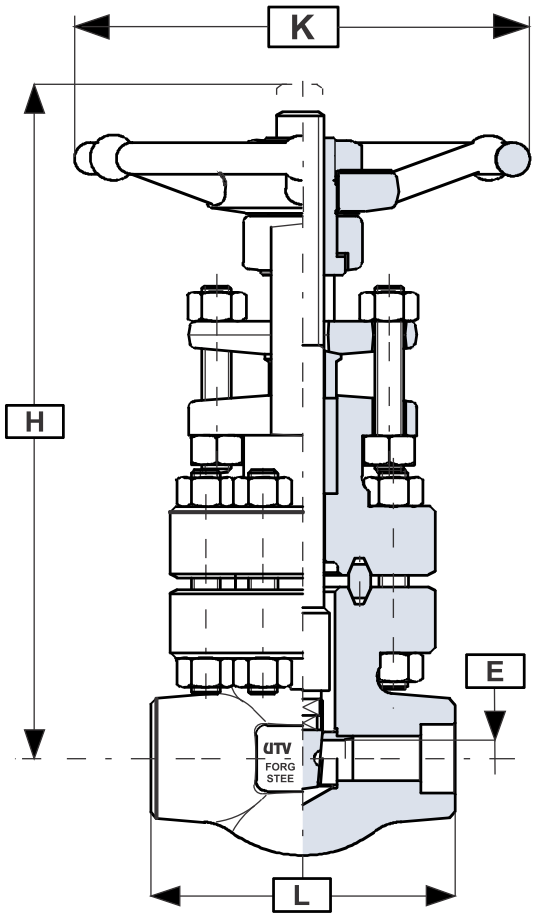


STANDARD BORE									
			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**90** 3,54	**110** 4,33	**127** 5,00		**130** 5,12	**150** 5,90
H (mm/in)			**175** 6,88	**217** 8,54	**234** 9,54		**295** 11,61	**375** 14,76
K (mm/in)			**120** 4,72	**175** 6,89	**175** 6,89		**200** 7,87	**260** 10,24
E (mm/in)			**11,5** 0,45	**15** 0,59	**19,5** 0,77		**32** 1,26	**40** 1,57
Wt.(kg/lb)			**2,0** 4,4	**3,2** 7,0	**4,9** 10,8		**8,5** 18,7	**15** 33
Catal.no.								

GATE VALVES-1500/2500-Bolted Bonnet-Socket Weld, Butt Weld

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22,
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil



Ratings (ASTM A105)

2500 p.s.i. @ 850°F
6170 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 9275 p.s.i.
Seat - 6800 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	*founded on* ASME B16.34
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-ASME B16.34

Connections

SW	Socket weld
TH	Threaded NPT
TS	Sw/NPT
SE	Sw(e)/NPT
SU	Sw8u)/NPT
B6	Butt weld 160

STANDARD BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**110** 4,33	**115** 4,53	**130** 5,12		**210** 8,27	**240** 9,45
H (mm/in)			**212** 8,35	**256** 10,08	**272** 10,71		**411** 16,18	**422** 16,61
K (mm/in)			**140** 5,51	**200** 7,87	**200** 7,87		**260** 10,24	**350** 13,77
E (mm/in)			**10** 0,48	**14** 0,55	**18** 0,71		**31** 1,22	**36,5** 1,44
Wt.(kg/lb)			**6,1** 13,4	**8,7** 19,1	**10,2** 22,4		**27,4** 60,3	**36,2** 79,6
Catal.no.								

UTVC™

USMANI
TUBES & VALVES CO. PVT. LTD.
MANUFACTURERS OF INDUSTRIAL VALVES

GATE VALVES-150# Extended Bonnet - Bolted - Flanged End / BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

150 p.s.i. @ 550°F
285 p.s.i. @ 100°F

Test pressure (ASTM A105)

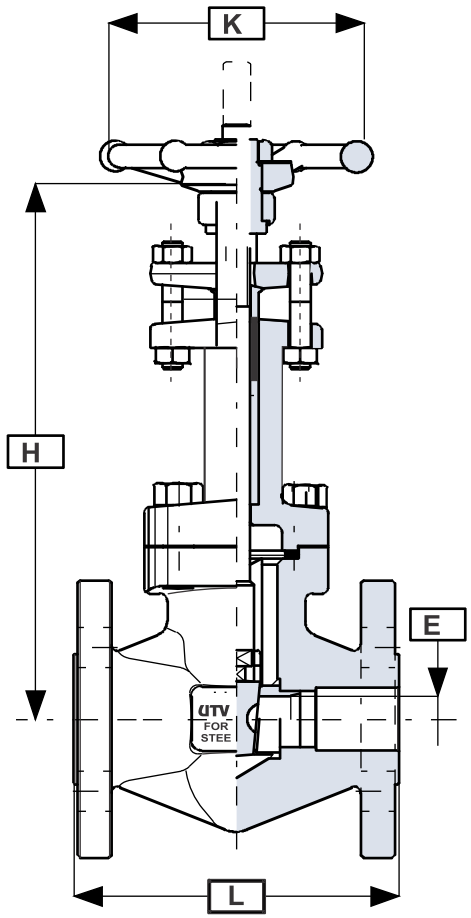
Hydraulic: *(minimum)*
Body - 450 p.s.i.
Seat - 325 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	API 598-BS 6755 (Pt.1)

Connections

RF Raised face (std.)
FF Flat finish



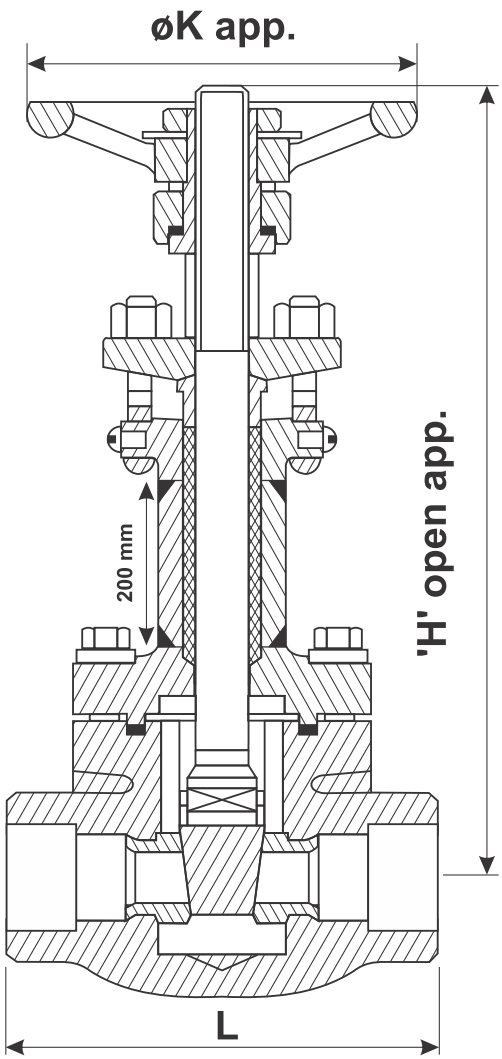
CONVENTIONAL BORE

	½"	3/4"	1"	1.1/2"	2"
L (mm/in)	**107,9** 4,25	**117,5** 4,63	**127,0** 5,00	**165,1** 6,50	**177,8** 7,00
H (mm/in)	**279** 11,05	**286** 11,32	**308** 12,19	**355** 14,04	**373** 14,75
K (mm/in)	**90** 3,54	**90** 3,54	**100** 3,94	**140** 5,51	**140** 5,51
E (mm/in)	**10** 0,39	**14** 0,55	**18** 0,71	**31** 1,22	**36,5** 1,44

FULL BORE

	½"	3/4"	1"	1.1/2"	2"
L (mm/in)	**107,9** 4,25	**117,5** 4,63	**127,0** 5,00	**165,1** 6,50	**177,8** 7,00
H (mm/in)	**283** 11,20	**291** 11,52	**316** 12,50	**373** 14,75	**414** 16,36
K (mm/in)	**90** 3,54	**90** 3,54	**100** 3,94	**140** 5,51	**200** 7,87
E (mm/in)	**14** 0,55	**18** 0,71	**24** 0,94	**36,5** 1,44	**48** 1,89

GATE VALVES-800-Extended Bolted Bonnet-Socket Weld/ NPT-BW



EX. B. FIG:U-FGT 1080 CLASS 800

MATERIAL SPECIFICATIONS

NO.	Part Name	Material		
1.	Body	A 105	F 304	F 316
2.	Bonnet	A 105	F 304	F 316
3.	Wedge	13%Cr	T304	T316
4.	Seat	13%Cr	T304	T316
5.	Spindle	T410	T304	T316
6.	Gland Bush	T410	T304	T316
7.	Gland Flange	A 105	F 304	
8.	Yoke Nut	ASTM A 439 Gr.D2/ AL- BRONZE		
9.	Hand Wheel	CAST STEEL		
10.	Hand Wheel Nut	Gr. 2H		
11.	Collar Bolt/ Stud & Nut	B7/ 2H	B8/ 8 OR B7/ 2H	
12.	Eye Bolt & Nut	B7/ 2H	B8 / 8	
13.	Gasket	SPW S.S 304/316 WITH CAF/GRAFOIL		
14.	Gland Packing	GRAPHITE ASBESTOS INHIB. & INCONEL WIRE REIN.		
15.	Screw / Rivet & Washer	STEEL		
16.	Bearing Washer	HARDENED STEEL	T304	T316
17.	Name Plate	ALUMINUM /SS		

DIMENSION TABLE - 800 CLASS - REDUCED BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 85	3.3 85	3.3 85	3.5 90	4 103	5 128	5.6 142
'H' app	165	165	165	175	215	270	285
ØK app	95	95	95	95	105	150	150
ØP	6.4	6.4	9.5	12.7	17.5	28.6	36.5
Wt. kg app	2.0	2.0	2.0	2.5	3.5	7.5	9.0

REF STANDARDS

MFG. AND DESIGN :BS 5352/API 602

FACE TO FACE : MG STD. / ASME B16.34

INSPECTION AND TESTING:AP1 598/BS 6755

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
not applicable

GLOBE VALVES-800-Bolted Bonnet-Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

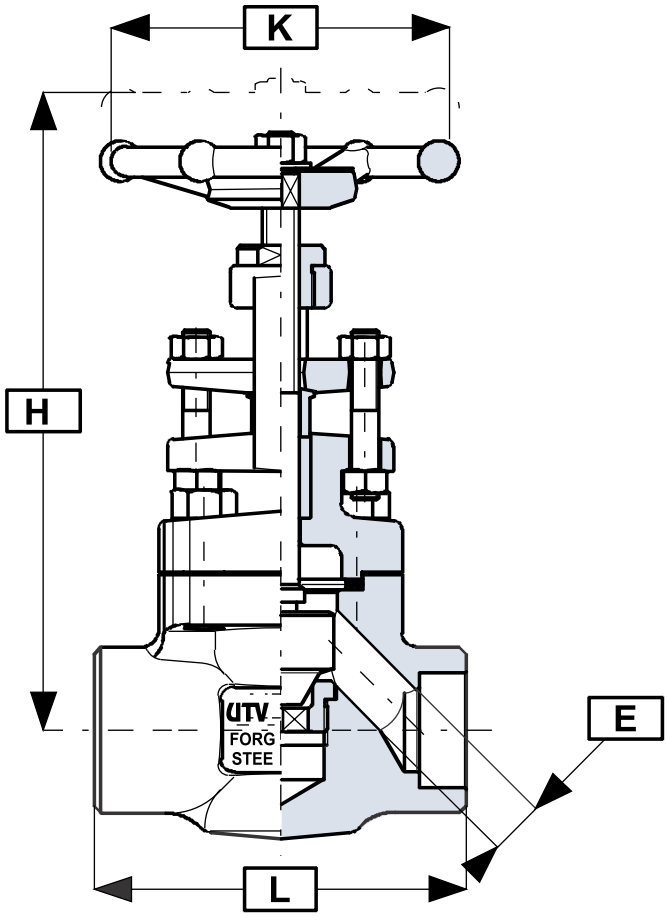
Hydraulic: *(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld
TS	SW/NPT
TH	Threaded NPT
SE	SW (in)/NPT
SU	SW (out)/NPT
B4	Butt weld 40
B8	Butt weld 80



REDUCED BORE

			1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L	(mm/in)		80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69
H	(mm/in)		152 5,98	159 6,26	182 7,17	214 8,43	283 11,14	306 12,05
K	(mm/in)		90 3,54	90 3,54	100 3,94	120 4,72	140 5,51	140 5,51
E	(mm/in)		9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28(4) 1,10	32(5) 1,26
Wt.	(kg/lb)		1,7 3,7	2 4,4	3,2 7,0	5,3 11,7	7,8 17,2	10,6 23,3
Catal. no.								

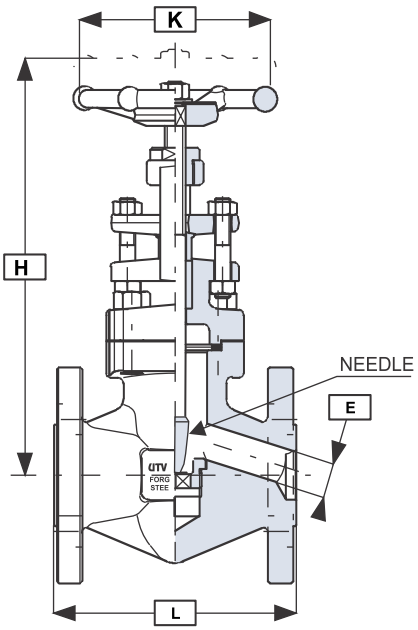
FULL BORE

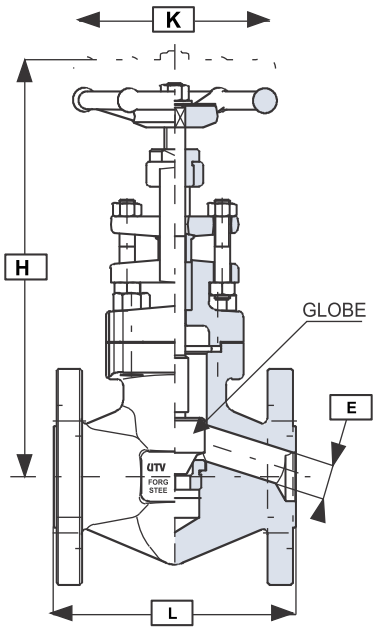
		1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L	(mm/in)	80 3,15	80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69	210 8,27
H	(mm/in)	150 5,91	152 5,98	159 6,26	182 7,17	214 8,43	283 11,14	306 12,05	327 12,87
K	(mm/in)	90 3,54	90 3,54	90 3,54	100 3,94	120 4,72	140 5,51	140 5,51	200 7,87
E	(mm/in)	6 0,24	9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28(4) 1,10	32(5) 1,26	40(6) 1,57
Wt.	(kg/lb)	1,8 4,0	1,8 4,0	2,1 4,6	3,3 7,3	5,4 11,9	7,9 17,4	10,7 23,5	16 35,2
Catal. no.									

GLOBE VALVES-150 - Bolted Bonnet - Flanged End/BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil





Ratings (ASTM A105)

150 p.s.i. @ 550°F
285 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 450 p.s.i.
Seat - 325 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF Raised face (std.)
FF Flat finish

REDUCED BORE

		1/4"	1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)		**107,9** 4,25	**107,9** 4,25	**117,5** 4,63	**127,0** 5,00		**165,1** 6,50	**203,2** 8,00
H (mm/in)		**186** 7,32	**186** 7,32	**189** 7,44	**203** 7,99		**283**11,14	**314**12,36
K (mm/in)		**90** 3,54	**90** 3,54	**90** 3,54	**100** 3,94		**140** 5,51	**140** 5,51
E (mm/in)		**9** 0,35	**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**(4)1,10	**32**(5)1,26
Wt.(kg/lb)		**3,1** 6,8	**3,1** 6,8	**4** 8,8	**5,7** 12,5		**10,6** 23,3	**15,4** 33,9
Catal.no.								

FULL BORE

		1/4"	1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)		**107,9**4,25	**107,9**4,25	**117,5** 4,63	**127,0** 5,00		**165, 1** 6,50	**203,2** 8,00
H (mm/in)		**188**7,40	**188**7,40	**192** 7,56	**207** 8,15		**283** 11,14	**314**12,36
K (mm/in)		**90**3,54	**90**3,54	**100** 3,94	**120** 4,72		**140** 5,51	**200** 7,87
E (mm/in)		**12,5**0,49	**12,5**0,49	**17,5** 0,69	**22,5** 0,89		**32** 1,26	**38** 1,57
Wt.(kg/lb)		**3** 6,6	**3** 6,6	**3,9** 8,6	**5,6** 12,3		**10,6** 23,3	**15,8** 34,8
Catal.no.								

GLOBE VALVES-300- Bolted Bonnet-Flanged End / BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H

Ratings (ASTM A105)

300 p.s.i. @ 850°F
740 p.s.i. @ 100°F

Test pressure (ASTM A105)

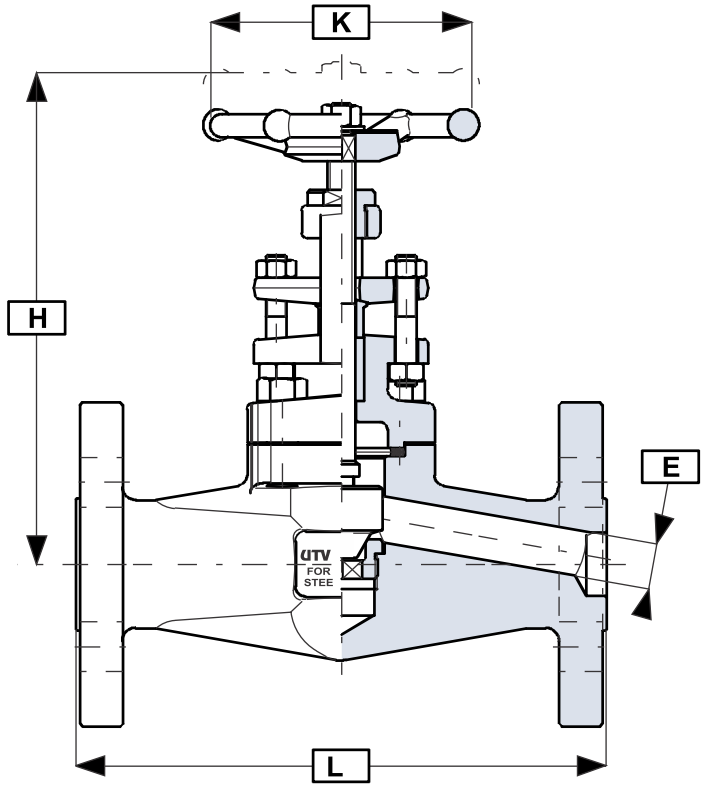
Hydraulic *(minimum)*
Body - 1125 p.s.i.
Seat - 825 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		



REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**152,4** 5,98	**177,8** 7,00	**203,2** 8,00		**228,6** 9,00	**266,7** 10,50
H (mm/in)			**152** 5,98	**159** 6,26	**182** 7,17		**283** 11,14	**306** 12,05
K (mm/in)			**90** 3,54	**90** 3,54	**100** 3,94		**140** 5,51	**140** 5,51
E (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**(4) 1,10	**32**(5) 1,26
Wt. (kg/lb)			**3,4** 7,5	**4,8** 10,6	**7,0** 15,4		**14,2** 31,2	**17,4** 38,3
Catal. no.								

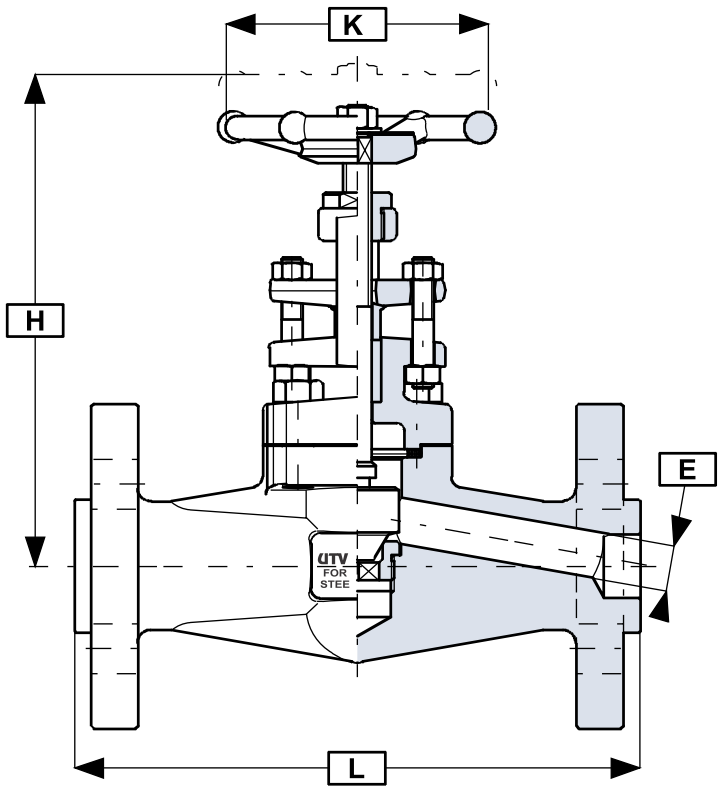
FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**152,4** 5,98	**177,8** 7,00	**203,2** 8,00		**228,6** 9,00	**266,7** 10,50
H (mm/in)			**152** 5,98	**159** 6,26	**182** 7,17		**283** 11,14	**306** 12,05
K (mm/in)			**90** 3,54	**100** 3,94	**120** 4,72		**140** 5,51	**200** 7,87
E (mm/in)			**13** 0,51	**17,5** 0,69	**22,5** 0,89		**34** 1,34	**45** 1,77
Wt. (kg/lb)			**3,4** 7,5	**4,8** 10,6	**7,0** 15,4		**14,2** 31,2	**17,4** 38,3
Catal.								

GLOBE VALVES-600-Bolted Bonnet Flanged End / BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H



Ratings (ASTM A105)

600 p.s.i. @ 850°F
1480 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 2225 p.s.i.
Seat - 1650 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		

REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**152** 5,98	**159** 6,26	**182** 7,17		**283** 11,14	**306** 12,05
K (mm/in)			**90** 3,54	**90** 3,54	**100** 3,94		**140** 5,51	**140** 5,51
E (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**(4) 1,10	**32**(5) 1,26
Wt.(kg/lb)			**3,6** 7,9	**5,1** 11,2	**7,8** 17,2		**14,2** 31,2	**19,4** 42,7
Catal.no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
Ff (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
Ha (mm/in)			**159** 6,26	**182** 7,17	**214** 8,43		**306** 12,05	**327** 12,87
Vl (mm/in)			**90** 3,54	**100** 3,94	**120** 4,72		**140** 5,51	**200** 7,87
Pf (mm/in)			**12** 0,47	**17,5** 0,69	**22,5** 0,89		**34** 1,34	**45** 1,77
Wt.(kg/lb)			**3,8** 8,4	**6,8** 15,0	**10,3** 22,7		**17,8** 39,2	**26,8** 59,0
Catal.no.								

GLOBE VALVES-1500/2500-Bolted Bonnet Flanged End / BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H

Ratings (ASTM A105)

600 p.s.i. @ 850°F
1480 p.s.i. @ 100°F

Test pressure (ASTM A105)

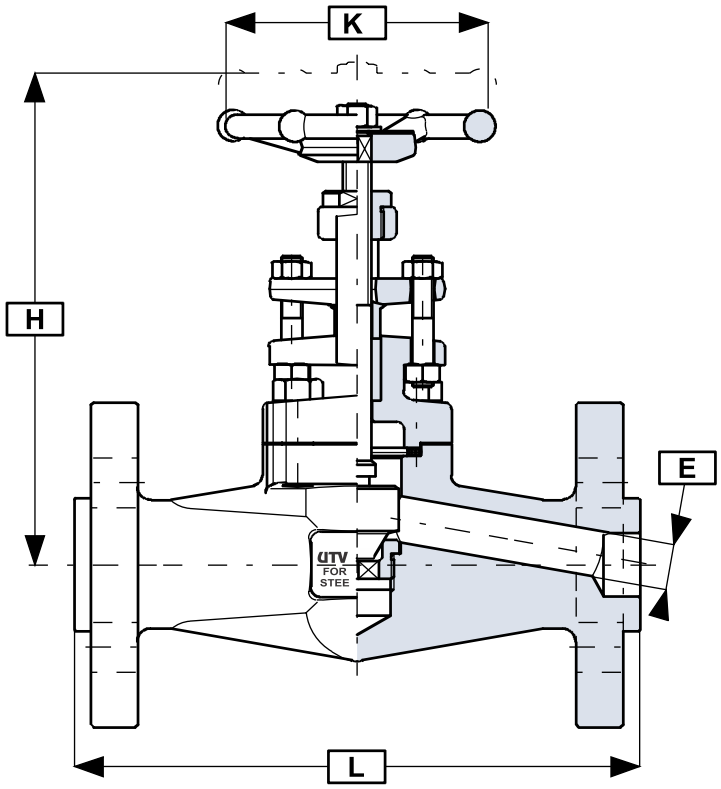
Hydraulic: *(minimum)*
Body - 2225 p.s.i.
Seat - 1650 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		



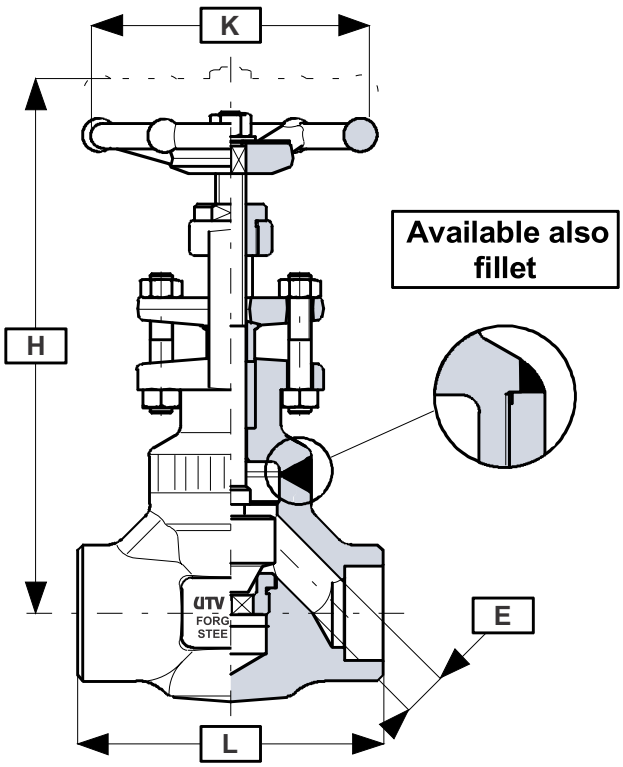
REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**152** 5,98	**159** 6,26	**182** 7,17		**283** 11,14	**306** 12,05
K (mm/in)			**90** 3,54	**90** 3,54	**100** 3,94		**140** 5,51	**140** 5,51
E (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**(4) 1,10	**32**(5) 1,26
Wt.(kg/lb)			**3,6** 7,9	**5,1** 11,2	**7,8** 17,2		**14,2** 31,2	**19,4** 42,7
Catal.no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
Ff (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
Ha (mm/in)			**159** 6,26	**182** 7,17	**214** 8,43		**306** 12,05	**327** 12,87
Vl (mm/in)			**90** 3,54	**100** 3,94	**120** 4,72		**140** 5,51	**200** 7,87
Pf (mm/in)			**12** 0,47	**17,5** 0,69	**22,5** 0,89		**34** 1,34	**45** 1,77
Wt.(kg/lb)			**3,8** 8,4	**6,8** 15,0	**10,3** 22,7		**17,8** 39,2	**26,8** 59,0
Catal.no.								

GLOBE VALVES-800# Welded Bonnet - SW/NPT/BW



Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic:*(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	API 602, BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-BS 6755 (Pt.1)

Connections

SW	Socket weld
TH	Threaded NPT
TS	Sw/NPT
SE	Sw(e)/NPT
SU	Sw(u)/NPT
B4	Butt weld 40
B8	Butt weld 80

CONVENTIONAL BORE

			1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
L	(mm/in)		80	3.15	90	3.54	110	4.33	127	5.00	155	5.00	170	6.69
H	(mm/in)		153	6.02	158	6.22	179	7.05	220	8.66	250	8.66	274	10.79
K	(mm/in)		90	3.54	90	3.54	100	3.94	120	4.72	140	4.72	140	5.51
E	(mm/in)		9	0.35	12.5	0.49	17.5	0.69	22.5	0.89	28[4]	0.89	32[5]	1.26
Wt.	(kg/lb)		1.4	3.1	1.6	3.5	3	6.6	4.8	10.6	6.8	15.0	9.4	20.7
Catal. no.														

FULL BORE

		1/4"		3/8"		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
L	(mm/in)	80	3.15	80	3.15	99	3.54	110	4.33	127	5.00	155	6.10	170	6.69	210	8.27
H	(mm/in)	150	5.91	153	6.02	158	6.22	179	7.05	220	8.66	250	9.84	274	10.79	327	12.87
K	(mm/in)	90	3.54	90	3.54	90	3.54	100	3.94	120	4.72	140	5.51	140	5.51	200	7.87
E	(mm/in)	6.5	0.26	9	0.35	12.5	0.49	17.5	0.69	22.5	0.89	28[4]	1.10	32[4]	1.26	38[4]	1.50
Wt.	(kg/lb)	1.4	3.1	1.4	3.1	1.6	3.5	3.0	6.6	4.8	10.7	6.8	15.0	9.4	20.7	14.6	32.1
Catal. no.																	

GLOBE VALVES-1500-Bolted Bonnet T-type - Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H

Ratings (ASTM A105) CL.1500/2500

1500 p.s.i. @ 850°F 3705 p.s.i. @ 100°F	2500 p.s.i. @ 850°F 6170 p.s.i. @ 100°F

Test pressure (ASTM A105) CL.1500/2500

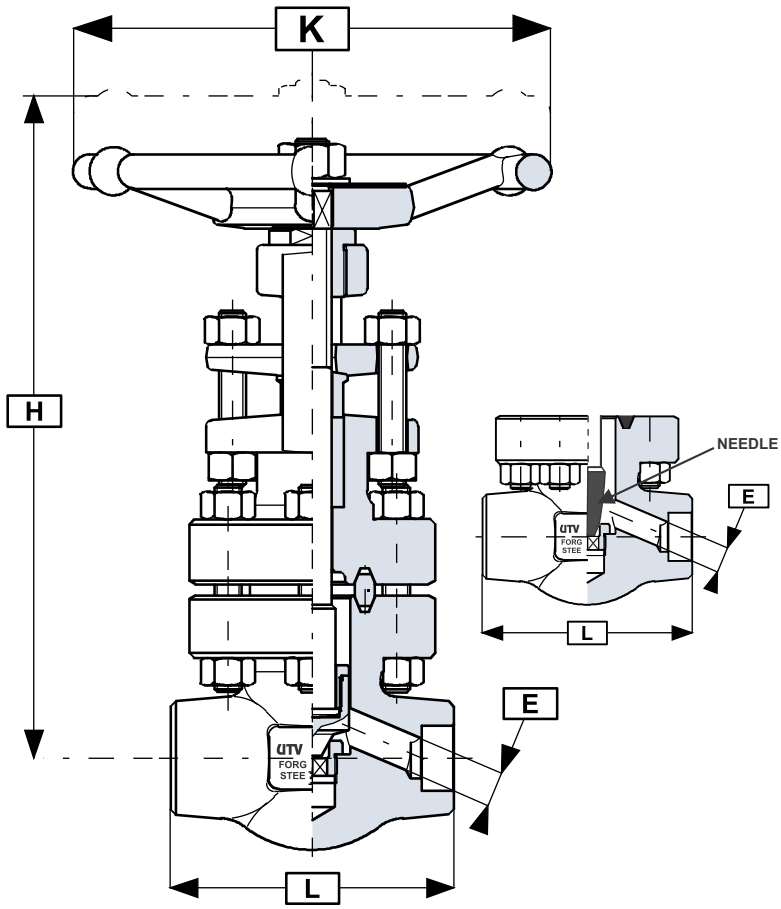
Hydraulic: *(minimum)* Body - 5575 p.s.i. Seat - 4100 p.s.i. **Air under water:** Seat - 85 p.s.i.	**Hydraulic:** *(minimum)* Body -9275 p.s.i. Seat - 6800 p.s.i. **Air under water:** Seat - 85 p.s.i.

Standards

Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld	**B8**	Butt weld 80
TH	Threaded NPT		
TS	Sw/NPT		
SE	Sw (in)/NPT		
SU	Sw (out)/NPT		
B6	Butt weld 160		



REDUCE BORE 1500

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**110** 4,33	**115** 4,53	**130** 5,12		**210** 8,27	**240** 9,45
H (mm/in)			**218** 8,58	**274** 10,79	**286** 11,26		**427** 16,8	**433** 17,05
K (mm/in)			**120** 4,72	**175** 6,89	**175** 6,89		**260** 10,24	**260** 10,24
E (mm/in)			**11** 0,43	**14,5** 0,57	**19** 0,75		**31** 1,22	**37,5** 1,48
Wt.(kg/lb)			**5,6** 12,3	**8,0** 17,6	**9,3** 20,5		**26,2** 57,6	**34,5** 75,9

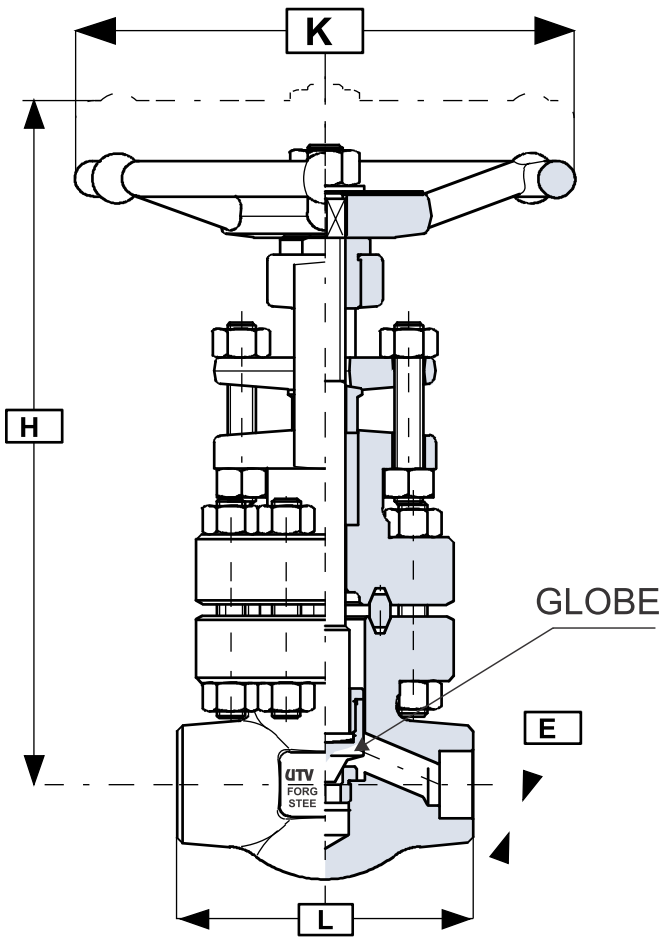
REDUCE BORE 2500

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**110** 4,33	**115** 4,52	**130** 5,12		**210** 8,27	**240** 9,45
H (mm/in)			**218** 8,58	**260** 10,24	**268** 10,55		**427** 16,81	**433** 17,05
K (mm/in)			**140** 5,51	**200** 7,87	**200** 7,87		**260** 10,24	**350** 13,77
E (mm/in)			**10** 0,39	**13** 0,51	**18** 0,71		**25** 0,98	**34** 1,33
Wt.(kg/lb)			**5,8** 13,0	**8,3** 18,3	**9,7** 21,3		**26,8** 59,0	**35,3** 77,7

GLOBE VALVES-2500-Bolted Bonnet T-type - Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil



Ratings (ASTM A105)

2500 p.s.i. @ 850°F
6170 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body -9275 p.s.i.
Seat - 6800 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	founded on ASME B16.34
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-ASME B16.34

Connections

SW	Socket weld
TH	Threaded NPT
TS	*Sw/NPT*
SE	Sw(in)/NPT
SU	Sw(out)/NPT
B4	Butt weld 160

STANDARD BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**110** 4,33	**115** 4,52	**130** 5,12		**210** 8,27	**240** 9,45
H (mm/in)			**218** 8,58	**260** 10,24	**268** 10,55		**427** 16,81	**433** 17,05
K (mm/in)			**140** 5,51	**200** 7,87	**200** 7,87		**260** 10,24	**350** 13,77
E (mm/in)			**10** 0,39	**13** 0,51	**18** 0,71		**25** 0,98	**34** 1,33
Wt. (kg/lb)			**5,8** 13,0	**8,3** 18,3	**9,7** 21,3		**26,8** 59,0	**35,3** 77,7
Catal. no.								

CHECK VALVES-800-Bolted Cover-Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

800 p.s.i. @ 850°F
1975 p.s.i. @ 100°F

Test pressure (ASTM A105)

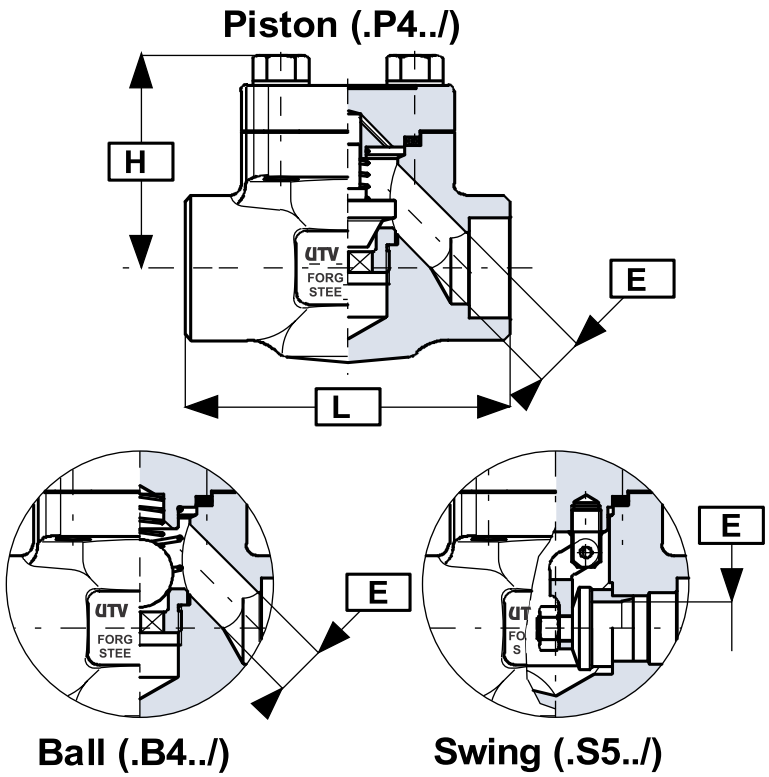
Hydraulic: *(minimum)*
Body - 3000 p.s.i.
Seat - 2175 p.s.i.
Air under water:
not applicable

Standards

Construction	*BS 5352*
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld
TH	Threaded NPT
TS	Sw/NPT
SE	Sw (in)/NPT
SU	Sw (out)/NPT
B4	Butt weld 40
B8	Butt weld 80



REDUCED BORE

			1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L (mm/in)			80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69
H (mm/in)			50 1,97	56 2,20	74 2,91	79 3,11	100 3,94	109 4,29
E (7) (mm/in)			9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28(4) 1,10	32(5) 1,26
Wt.(kg/lb)			1,1 2,4	1,8 4,0	2,6 5,7	3,6 7,9	5,5 12,1	8,4 18,5
Catal. no.								

FULL BORE

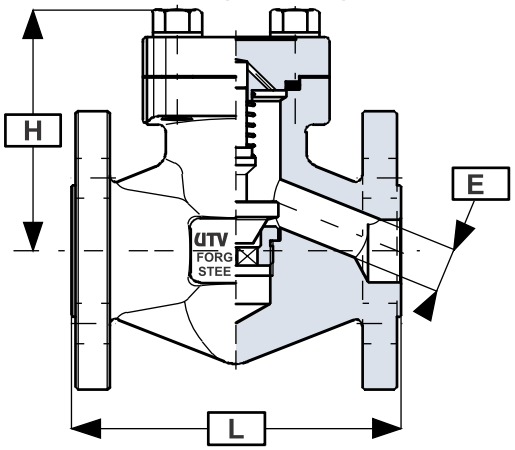
	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
L (mm/in)	80 3,15	80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69	210 8,27
H (mm/in)	50 1,97	50 1,97	56 2,20	74 2,91	79 3,11	100 3,94	109 4,29	135 5,31
E (7) (mm/in)	6,5 0,26	9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28(4) 1,10	32(5) 1,26	38(6) 1,50
Wt.(kg/lb)	1,1 2,4	1,1 2,4	1,8 4,0	2,6 5,7	3,6 7,9	5,5 12,1	8,4 18,5	11,8 26,0
Catal. no.								

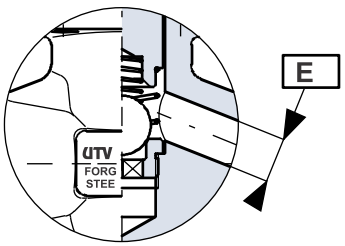
CHECK VALVES-150-Bolted Cover-Flanged End / BW

Material of Construction

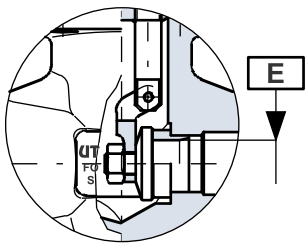
Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Piston (.P4../15)





Ball (.B4../15)



Swing (.S5../15)

Ratings (ASTM A105)

150 p.s.i. @ 550°F
285 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 450 p.s.i.
Seat - 325 p.s.i.
Air under water:
not applicable

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF	Raised face (std.)
FF	Flat finish

REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**107,9** 4,25	**117,5** 4,63	**127,0** 5,00		**165,1** 6,50	**203,2** 8,00
H (mm/in)			**84** 3,31	**87** 3,43	**92** 3,62		**97** 3,82	**124** 4,88
E (6) (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28** (4) 1,10	**32** (5) 1,26
Wt. (kg/lb)			**2,6** 5,7	**3,8** 8,4	**5,1** 11,2		**8,4** 18,5	**14,2** 31,2
Catal. no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**107,9** 4,25	**117,5** 4,63	**127,0** 5,00		**165,1** 6,50	**203,2** 6,50
H (mm/in)			**84** 3,31	**87** 3,43	**92** 3,62		**110** 4,33	**124** 4,88
E (6) (mm/in)			**12,5** 0,49	**17,5** 0,69	**22,5** 0,89		**32** 1,38	**38** 1,50
Wt. (kg/lb)			**2,6** 5,7	**3,8** 8,4	**5,1** 11,2		**8,4** 18,5	**14,7** 31,2
Catal. no.								

CHECK VALVES-300-Bolted Cover - Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

300 p.s.i. @ 850°F
740 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 1125 p.s.i.
Seat - 825 p.s.i.
Air under water:
not applicable

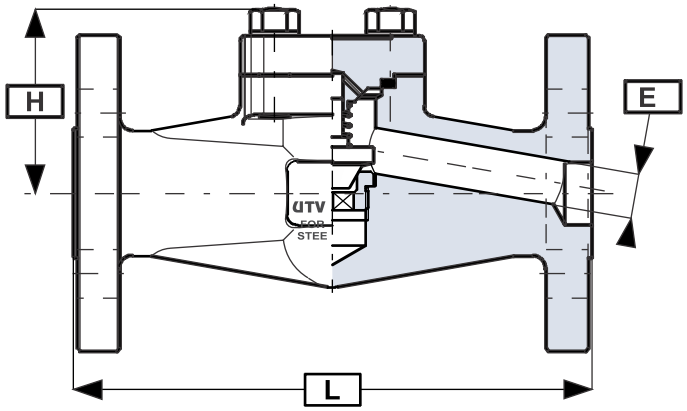
Standards

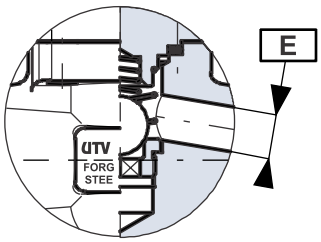
Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

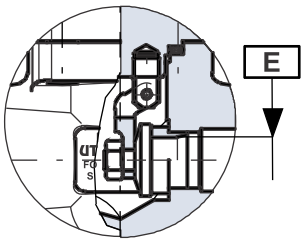
RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		

Piston (.P4../30)





Ball (.B4../30)



Swing (.S5../30)

REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**152,4** 6,00	**177,8** 7,00	**203,2**[6] 8,00		**228,6**[6] 9,00	**266,7** 10,50
H (mm/in)			**50** 1,97	**56** 2,20	**74** 2,91		**100** 3,94	**109** 4,29
E[7] (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**[4] 1,10	**32**[5] 1,26
Wt. (kg/lb)			**2,5** 5,5	**4,2** 9,2	**5,7** 12,5		**11,2** 24,6	**14,4** 31,7
Catal. no.								

FULL BORE

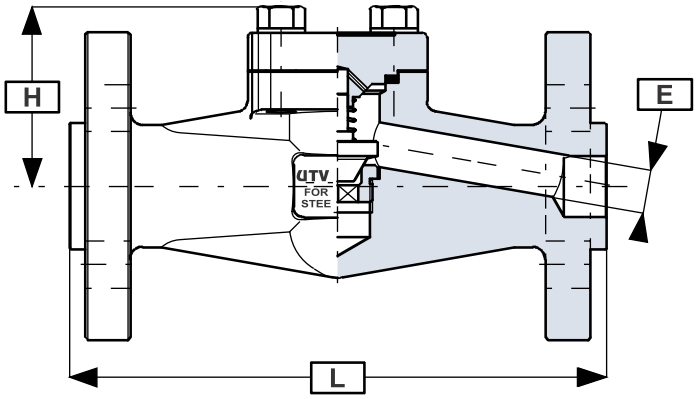
			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**152,4** 6,00	**177,8** 7,00	**203,2**[6] 8,00		**228,6**[6] 9,00	**266,7** 10,50
H (mm/in)			**50** 1,97	**56** 2,20	**92** 3,62		**110** 4,33	**140** 5,51
E[7] (mm/in)			**12,5** 0,49	**17,5** 0,69	**22,5** 0,89		**35** 1,38	**45** 1,77
Wt. (kg/lb)			**2,5** 5,5	**4,2** 9,2	**5,7** 12,5		**11,2** 24,6	**14,4** 31,7
Catal. no.								

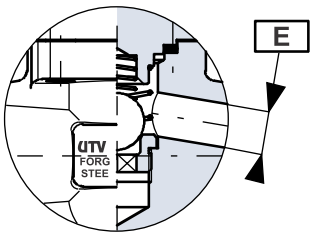
CHECK VALVES-600-Bolted Cover-Flanged End / BW

Material of Construction

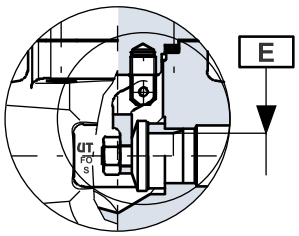
Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Piston (.P4../60)





Ball (.B4../60)



Swing (.S5../60)

Ratings (ASTM A105)

600 p.s.i. @ 850°F
1480 p.s.i. @ 100°F

Test pressure (ASTM A105)

Hydraulic: *(minimum)*
Body - 2225 p.s.i.
Seat - 1650 p.s.i.
Air under water:
not applicable

Standards

Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		

REDUCED BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**50** 1,97	**56** 2,20	**74** 2,91		**100** 3,94	**109** 4,29
E (6) (mm/in)			**9** 0,35	**12,5** 0,49	**17,5** 0,69		**28**(4) 1,10	**32**(5) 1,26
Wt.(kg/lb)			**3,1** 6,8	**5** 11,0	**7,3** 16,1		**12** 26,4	**16,6** 36,5
Catal.no.								

FULL BORE

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**165,1** 6,50	**190,5** 7,50	**215,9** 8,50		**241,3** 9,50	**292,1** 11,50
H (mm/in)			**50** 1,97	**56** 2,20	**92** 3,62		**110** 4,33	**140** 5,51
E (6) (mm/in)			**12,5** 0,49	**17,5** 0,69	**22,5** 0,89		**35** 1,38	**45** 1,77
Wt.(kg/lb)			**3,1** 6,8	**5** 11,0	**7,3** 16,1		**12** 26,4	**16,6** 36,5
Catal.no.								

CHECK VALVES-1500/2500-Bolted Cover - Flanged End / BW / RJ

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105) CL.1500/2500

1500 p.s.i. @ 850°F 3705 p.s.i. @ 100°F	2500 p.s.i. @ 850°F 6170 p.s.i. @ 100°F

Test pressure (ASTM A105) CL.1500/2500

Hydraulic: *(minimum)* Body - 5575 p.s.i. Seat - 4100 p.s.i. **Air under water:** not applicable	**Hydraulic:** *(minimum)* Body - 9275 p.s.i. Seat - 6800 p.s.i. **Air under water:** not applicable

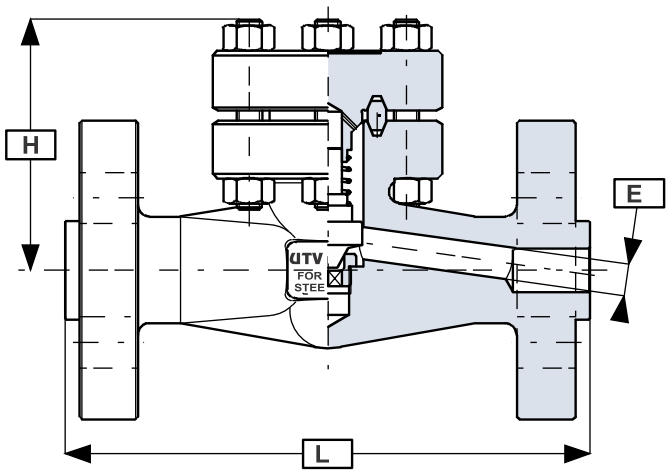
Standards

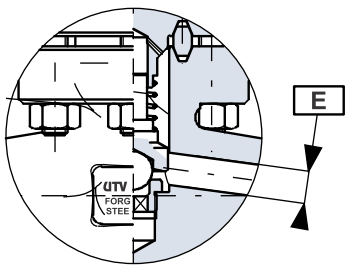
Construction	BS 5352
Flanged	ASME B16.5, ASME B16.10
Test	BS 6755 (Pt.1)

Connections

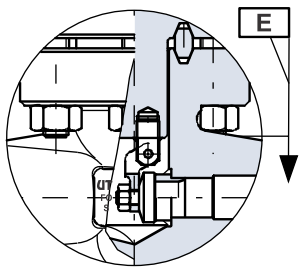
RF	Raised face (std.)	**LF**	Large female
RJ	Ring joint	**LG**	Large groove
SF	Small female	**LM**	Large male
SG	Small groove	**LT**	Large tongue
SM	Small male		
ST	Small tongue		

Piston (P.../150)





Ball (B.../150/250)



Swing (S.../150/250)

REDUCE BORE 1500												
			1/2"		3/4"		1"			1.1/2"		2"
L (mm/in)			**215,9**	8,50	**228,6**	9,00	**254,0**	10,00		**304,8**	12,00	**368,3** 14,50
H (mm/in)			**93**	3,66	**109**	4,29	**122**	4,80		**158**	6,22	**171** 6,73
E[4] (mm/in)			**11**	0,43	**14,5**	0,57	**19**	0,75		**31**	1,22	**37,5** 1,48
Wt. (kg/lb)			**7,5**	16,5	**10,9**	24,0	**14,4**	31,7		**30,3**	67,0	**44,0** 96,8

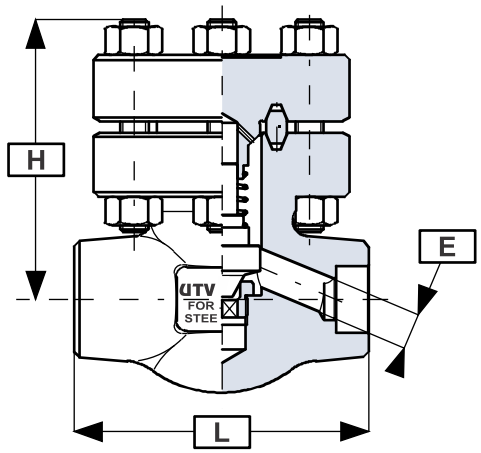
REDUCE BORE 2500												
			1/2"		3/4"		1"			1.1/2"		2"
L (mm/in)			**263,5**	10,37	**273,0**	10,75	**308,0**	12,13		**384,2**	15,13	**450,8** 17,75
H (mm/in)			**93**	3,66	**109**	4,29	**122**	4,80		**158**	6,22	**171** 6,73
E[4] (mm/in)			**10**	0,39	**13**	0,51	**18**	0,71		**25**	0,98	**34** 1,33
Wt. (kg/lb)			**8,5**	18,7	**12,5**	27,5	**19,2**	42,2		**40,8**	89,8	**59,0** 129,8

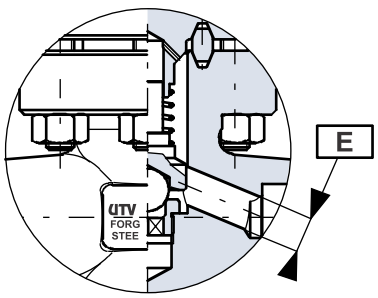
Check VALVES-1500 / 2500-Bolted Cover - Socket Weld/ NPT-BW

Material of Construction

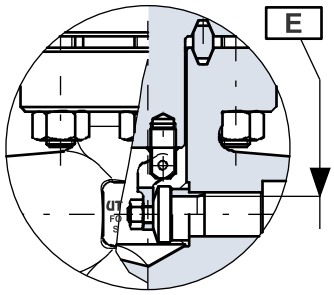
Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Cover	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Plug	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Seat	:	HF Stellited SS/304/316/Cr. 13%
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Piston (P.../)





Ball (B.../)



Swing (S.../)

Ratings (ASTM A105) CL.1500/2500

1500 p.s.i. @ 850°F 3705 p.s.i. @ 100°F	2500 p.s.i. @ 850°F 6170 p.s.i. @ 100°F

Test pressure (ASTM A105) CL.1500/2500

Hydraulic: *(minimum)* Body - 5575 p.s.i. Seat - 4100 p.s.i. **Air under water:** not applicable	**Hydraulic:** *(minimum)* Body - 9275 p.s.i. Seat - 6800 p.s.i. **Air under water:** not applicable

Standards

Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld	**B8**	Butt weld 80
TH	Threaded NPT		
TS	Sw/NPT		
SE	Sw (in)/NPT		
SU	Sw (out)/NPT		
B6	Butt weld 160		

REDUCE BORE 1500

		1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)		**110** 4,33	**115** 4,53	**130** 5,12		**210** 8,27	**240** 9,45
H (mm/in)		**93** 3,66	**109** 4,29	**122** 4,80		**158** 6,22	**171** 6,73
E [4] (mm/in)		**11** 0,43	**14,5** 0,57	**19** 0,75		**31** 1,22	**37,5** 1,48
Wt. (kg/lb)		**3,8** 8,4	**5,9** 13,0	**6,8** 15,0		**18,8** 41,4	**23,7** 52,1

REDUCE BORE 2500

			1/2"	3/4"	1"		1.1/2"	2"
L (mm/in)			**263,5** 10,37	**273,0** 10,75	**308,0** 12,13		**384,2** 15,13	**450,8** 17,75
H (mm/in)			**93** 3,66	**109** 4,29	**122** 4,80		**158** 6,22	**171** 6,73
E [4] (mm/in)			**10** 0,39	**13** 0,51	**18** 0,71		**25** 0,98	**34** 1,33
Wt. (kg/lb)			**8,5** 18,7	**12,5** 27,5	**19,2** 42,2		**40,8** 89,8	**59,0** 129,8

GLOBE VALVES-1500/2500-Welded Bonnet T-type - Socket Weld/ NPT-BW

Material of Construction

Body	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Bonnet	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Wedge	:	ASTM A105 N, CF8, CF8M, 316/316L NACE, F11, F22, LF2
Trim	:	ASTM A82 Gr. F6, 11, 12, 8, 5
Seat	:	HF Stellited
Gland Packing	:	Graphite Asbestos, INHIB, inconel wire rein
Bolt + Nut	:	B7/2H - B8/8 or B7/2H
Gasket	:	SPW SS304/316 with CAF/Grafoil

Ratings (ASTM A105)

1500 p.s.i. @ 850°F
3705 p.s.i. @ 100°F

Test pressure (ASTM A105)

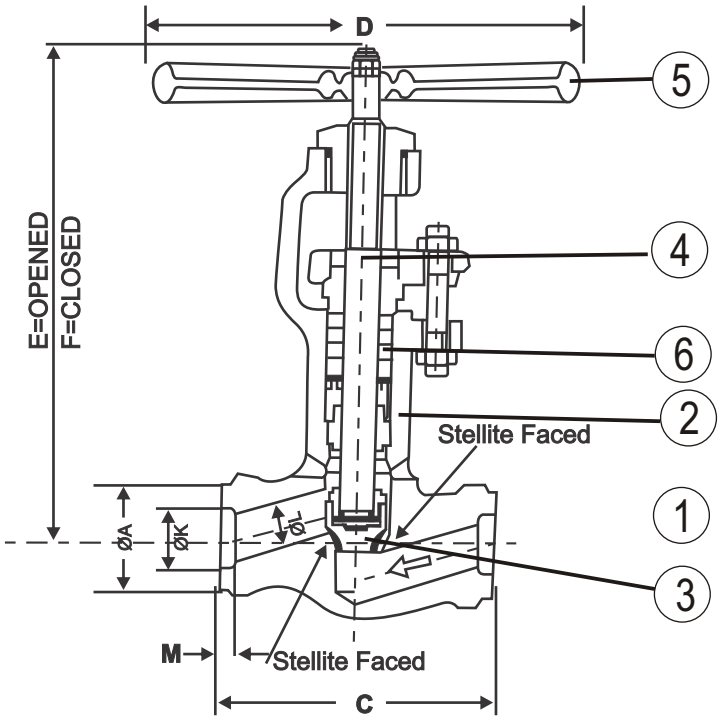
Hydraulic: *(minimum)*
Body - 5575 p.s.i.
Seat - 4100 p.s.i.
Air under water:
Seat - 85 p.s.i.

Standards

Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

Connections

SW	Socket weld
TH	threaded NPT
TS	Sw/NPT
SE	Sw(e)/NPT
SU	Sw(u)/NPT
B6	Butt weld 160
B8	Butt weld 80



stem threaded

Class 2500 & 3000 Spl (Socket Weld End) **DIMENSIONS (mm)**

Valve mm	Size inch	A	C	D	E	F	K	L	M	Wt.(Kg)
15	½"	41.3	127.0	181	225	215	21.7	11.1	9.5	5.0
20	3/4"	50.0	127.0	206	286	270	27.1	14.3	12.7	9.0
25	1"	57.2	127.0	206	286	270	33.8	14.3	12.7	9.0


STORE DETAILS CERTIFICATE


Certificate of Registration
USMANI TUBES & VALVES CO. PVT. LTD.
ISO 45001:2018
Occupational Health and Safety Management System


Certificate of Registration
ISO 9001:2015
Quality Management System


Certificate of Registration
ISO 14001:2015

UTVC™

USMANI
TUBES & VALVES CO. PVT. LTD

Correspondence Office:
Virani Business Centre, B / 301, Opp. Bharat Gears Company, Kausa, Thane - 400612, (INDIA)
info@usmanivalves.com | sales@usmanivalves.com | www.usmanivalves.com